

THUNDERBOLTS

*By the author of
"Watchwords" etc.*

MAJOR-GENERAL
J.F.C. Fuller

SKEFFINGTON

THUNDERBOLTS

By

Major-General J. F. C. FULLER

"Then shall the right aimed thunderbolts
go abroad, and, as from a well drawn bow,
shall they fly to the mark."

Wisdom of Solomon.

1946

SKEFFINGTON & SON, LTD.

47 *Prince's Gate* - - - - - S.W.7

LONDON : NEW YORK : MELBOURNE : SYDNEY

ACKNOWLEDGMENT

Some of these essays have already appeared in the following periodicals : *Evening Standard*, the *Leader*, *Sunday Pictorial*, *New English Weekly*, the *Spectator*, the *Weekly Review*, *Peace News* and *Autumn Pie*. To the Editors of these journals I hereby make the customary acknowledgments and tend my thanks. Others are published for the first time.

J. F. C. F.

THIS BOOK IS PRODUCED IN
COMPLETE CONFORMITY WITH THE
AUTHORIZED ECONOMY STANDARDS

MADE AND PRINTED IN GREAT BRITAIN AT
THE FLEET STREET PRESS
EAST HARDING STREET, E.C.4

CONTENTS

	PAGE
1 WAR AIMS : A STUDY OF THE NAPOLEONIC WARS	7
2 THE PRESS, THE WAR AND THE P.B.P.	16
3 VOLTAIRE'S TANK	19
4 MECHANIZATION TWO THOUSAND YEARS AGO	22
5 THE CONQUEST OF THE AIR	24
6 A SURPRISING CHRISTMAS	27
7 IS THE BOMBER DOOMED?	30
8 THE RULES OF WAR	32
9 ITALY AND GALLIPOLI	35
10 TOWARDS MILITARY SOCIALISM	37
11 BOMBING AND ITS ISSUES	40
12 THE TOLL OF WAR	42
13 THE NEXT WAR	45
14 THE DECISIVE FACTOR	47
15 AIRCRAFT IN BATTLE	49
16 HOW THE NAPOLEONIC WARS ENDED	51
17 CASSINO	54
18 IS BOMBING SHORTENING THE WAR?	55
19 AFTER THE TANK, WHAT?	57
20 BRICKS AND BLOOD	59
21 CLAUSEWITZ AND OURSELVES	61
22 OUR SOLDIERS OF TO-MORROW	64
23 CHEMICAL WARFARE, ITS ORIGINS	66
24 POISON GAS!	69
25 BOMBARDMENTS OLD AND NEW	71
26 LEARN FROM OUR GREAT SOLDIERS	73
27 EUROPE IN THE CRUCIBLE	76
28 OUR GREATEST DANGER	77
29 THE FUTURE OF GENERALSHIP	80
30 POORER OR RICHER AFTER THE WAR?	83
31 STRATEGICAL STOCKTAKING	85
32 THE WHITE TERROR	87
33 WHY GERMANY FAILED	89
34 THE FLYING BOMB	93

CONTENTS

	PAGE
35 THE TERROR OF THE MACHINE	95
36 THE BABES IN THE WOOD	97
37 THE SECRET OF BLITZKRIEG	100
38 RIDDLES OF THE WAR	101
39 THE BEE IN THE NAZI BONNET	104
40 THE TRIUMPH OF THE MACHINE	106
41 GENTLEMEN VERSUS CADS	107
42 THE WITCHES' CAULDRON	110
43 IS EUROPE GOING GUERRILLA?	111
44 WHO BOGGED US ON THE RHINE?	114
45 MILITARY INVENTIONS	117
46 THE WAR ROCKET	123
47 THE FOUNDATIONS OF VICTORY	126
48 VOLUNTARY SERVICE OR CONSCRIPTION	130
49 PEACE, POWER AND POLICY	132
50 VICTORY 1815, 1918 AND 1945	137

WAR AIMS: A STUDY OF THE NAPOLEONIC WARS

"Are we really going to accept the position that the whole future development of science, our organizations, our increasing co-operation and the fruitful era of peace and good will among men and nations ; are all these developments to be arbitrarily barred by the price of gold? Is the progress of the human race in this age of almost terrifying expansion to be arbitrarily barred and regulated by the fortuitous discovery of gold mines here and there or by the extent to which we can persuade the existing cornerers and hoarders of gold to put their hoards again into the common stock? . . . I therefore point to this evil and to the search for the methods of remedying it as the first, second and third of all the problems which should command and rivet our thoughts."

WINSTON S. CHURCHILL, 21st April, 1932.

LONG before the French Revolution turned to thunder and lightning, the storm had been tamped in London. There lay stored away the greater part of the world's stock of gold and silver, and as after the Seven Years' War nearly every country in Europe had to borrow from London, the basis of European economic structure was changed from wealth to debt.

Among these nations France became the more heavily involved, as she was compelled to borrow large sums in order to pay for British colonial imports as well as her share of the cost of the war of the American Rebellion. Soon she was reduced to borrow in order to pay interest on former loans. Thus it came about that, when Bentham was writing his *Defence of Usury*, Necker, Louis XVI's banker and treasurer, was gambling with a nullity. Between 1763 and 1783, by borrowing, he created an additional debt of no less than 425 million livres, which enserfed the King to the usurers, whose weapons were the newspapers, which they either bought or were subsidizing. By them they focused public opinion on their aim, which was the creation of a constitutional monarchy on the English pattern, according to which the King was subservient to the Money-Power.

Such was the crucial factor which precipitated the French Revolution. It was not misery, because in 1789 social conditions were better than in 1763, instead it was the check caused by the credit and debt system to increasing prosperity.

In 1788 the financial conditions in France were as follows: The gross expenditure was 633 million livres and the gross revenue 472 million. Out of this, 260 million was expended on the cost of collection, and as services of the debt amounted to 236 million, before any of the national requirements could be paid for, there was a deficit of 24 million. In short, France was bankrupt. The result of this was that Necker compelled the King to summon the States-General in order to set up a constitutional monarchy—a form of

government "best adapted for the smooth working of the debt system". This assembly opened at Versailles on 5th May, 1789.

Then Necker attempted to float two large loans, and failing to do so the Bishop of Autun (Talleyrand), lover of his daughter, Madame de Staël, proposed that the Church lands should be confiscated, which suggestion was supported by Mirabeau, who urged that money in the form of "assignats" should be issued against them. Necker, however, outjockeyed him, and obtained vast tracts of land as security for his promises to pay in gold and silver which did not exist. The people refusing the notes issued, a run on the banks followed, whereupon Necker fled the country and Mirabeau was proclaimed dictator. His first act was to issue "assignats" as land-money.

Though unhorsed, Necker was by no means defeated; therefore, in order to destroy the "assignats", he set about to foment a war against Austria. In this he was backed by the City of London, in which it was realized that, should land-money right France, it had every chance of righting other agricultural countries, and that this would lead to the dethronement of gold. To gain this end a violent Press campaign was opened against Austria, when, in April 1791, Mirabeau died.

This war led to the fall of the French monarchy and the Terror, after which a Directory of Five was established under Barras—the puppet of the Money-Power—who, to "restore confidence", ordered the destruction of the "assignats", which so far had financed the armies of the Revolution.

Gold being once again enthroned, the Allies lost their energy. Prussia and Austria turned to Poland, which finally disappeared as a kingdom in 1795. That year Prussia made peace with France; Holland was compelled to join the French, and Spain voluntarily did so. Thus the coalition was reduced to Great Britain, Austria and the minor principalities in Germany and Italy, when, suddenly, on 5th October (13th Vendémiaire), a hostile mob and a "whiff of grape-shot" in the neighbourhood of the Tuileries revealed the Master. . . . "There was an eye to see in this man, a soul to dare and do. He rose naturally to be the King. All men saw that he *was* such."

This man was General Bonaparte. He had studied the English system and he understood it. He saw that the conditions prevailing in England and France were so different that, if this system were applied to the latter, nothing but chaos would result. As regards government, he once said to General Gourgaud: "deliberative assembly is a terrible thing. The English constitution suits England only." As regards economics, his ideas were those of Rousseau. According to him: "The perfect state . . . was one that sufficed for all its needs and could do without foreign trade. The ideal commonwealth was 'that which can subsist without other nations, and without which other nations can subsist'."

In accordance with this idea, in September 1793, the Convention excluded all goods not carried in French bottoms, and, in October, an embargo was placed on all British merchandise.

It was this system which Napoleon adopted. He believed in the sanctity of private property, also that a self-sufficient nation was more contented than one composed of purveyors. That toil produces a hard and healthy people; whereas trade, a soft and crafty. Above all, he believed that the despotism of gold could only lead to economic slavery. Coming from a poor and peasant

country, he feared debt and despised wealth, saying: "I have a taste for founding, and not for possessing."

When at St. Helena, he explained his economic system to Montholon as follows:

"1st—*Agriculture*: the soul, the first basis of empire.

"2nd—*Industry*: the comfort and happiness of the population.

"3rd—*Foreign Trade*: the superabundance, the proper application of the surplus of agriculture and industry. . . .

"Foreign trade, which in its results is infinitely inferior to agriculture, was an object of subordinate importance in my mind. Foreign trade is made for agriculture and home industry, and not the two latter for the former. . . ."

With this policy in mind, Napoleon studied English finance, and to him it was synonymous with usury. To him interest on foreign investments was no other than the toll paid by a conquered people, a people reduced to financial serfdom. He would have nothing to do with loans; therefore the clash with England was inevitable.

But how to get at England? that was his problem; consequently the mastery of the sea, as he said himself, became "the principal and constant aim of my policy". In the end he lost, for the sea defeated the land; yet, had he been victorious, this is what he said he would have done:

"Had I maintained my power, I would have changed the course of trade, and the direction of industry. I had naturalized sugar and indigo in France, and I should have naturalized cotton, and many other articles of foreign produce. I should have knocked up the colonies, if we had continued to be denied a share in them.

"With us the impulse was most powerful. National prosperity and science advanced beyond measure. Yet your (he was talking to Colonel Wilks) Ministers proclaimed through all Europe that the French were overwhelmed with misery and were retrograding to a state of barbarism. . . .

"Had I been allowed sufficient time, there would soon have been no such thing as trades in France, they would all have been converted into arts. . . .

"England and France hold in their hands the fate of the world; and particularly that of European civilization. What injury did we not do each other! . . . What good might we not have done!"

Whether this would have been so or not, history has decided that we shall never know. Yet there can be no doubt that, from start to finish, Napoleon's central idea was the resuscitation of the Empire of the Cæsars or anyhow that of Charlemagne under the leadership of France.

His first campaign, that of 1796, forced the City of London off gold. Next he determined to strike at England's eastern line of communications and so compel her to seek peace. This led to his abortive Egyptian campaign, to his return to France and to his appointment as First Consul, the new Constitution being ratified by a plebiscite of 3,001,007 votes to 1,526.

Forthwith he imposed a rigorous censorship on the Press, and, refusing to reduce the tariff on English goods, he crossed the Alps, invaded Italy, and on 14th June, 1800, decisively defeated the Austrians at Marengo. Thereupon Paul I, Tsar of Russia, who was friendly to France, closed the Baltic to English shipping, which sent the price of wheat in London soaring from £2 10s. to £7 15s. the quarter.

Seeing England's trade blocked in the Baltic, at once Napoleon set out to block it in the Mediterranean; for he was convinced that the "English system", as he called it, was based on England's trade with India. He, thereupon, approached Godoy Prince of Peace, who was virtual master of Spain, and by the treaty of San Ildefonso obtained Palma, Elba and Louisiana, whereupon an expedition was launched against Portugal in order to compel her to close her ports to English shipping. Next, he agreed to acknowledge the Pope as head of the Church if he would do likewise.

This led to such a crippling of England's foreign trade that overtures of peace were made. These led to the Treaty of Amiens, which was signed on 27th March, 1802.

Whilst this peace was being negotiated, Paul I was assassinated and succeeded by Alexander I, who, abandoning his father's policy, threw his ports open to England. The Baltic thus freed, London at once decided to force a trade treaty upon France, which meant the removal of the French tariff. When this became known, an outcry went up from the French manufacturers. But Napoleon had no intention of agreeing to this proposal, because he was certain that its hidden object was to force him into debt. Yet he realized that, should he refuse to negotiate, the seas would be closed to him. That this was so, is corroborated by what he said to Caulincourt in 1812.

"The people of Europe," he declared, "are blind to the real danger. They paid heed to nothing but their inconvenience on account of the war at sea. One might think all the politics and all the interests of this unhappy Continent are bounded by the price of a cask of sugar. It is pitiable: yet that is how things stand. They protest only against the French, and refuse to see anything but the French armies; as though the English also were not present on every side, and present much more threateningly. Are not Heligoland, Gibraltar, Tarifa and Malta, English citadels? Do they not threaten the trade of all the Powers? . . . But for me, the European governments would grant the English to-morrow the supremacy they desire. When all trade protection is subject to the whims of the London Government—when we are forced to eat sugar of their selling only, and to wear stockings and clothes of their making—then Petersburg, Vienna and Berlin will grasp the fact of the English monopoly. Until then they will shut their eyes to it, for fear of recognizing that I am defending the interests of all of us alike. The fact is plain to people of good will. But where is there any good will? The blindness of European politics is pitiable."

This peace was but an armistice. To the British Ambassador, Lord Whitworth, Napoleon said: "Do you suppose that I want to risk my power and my renown in a desperate struggle? . . . If I have war with you, I shall take from you every ally on the Continent. . . . You will blockade us, but I will blockade you in my turn." He wanted peace, because his mind was bulging with vast peaceful projects—his legal code, the building of roads, improving of harbours, extending of canals and beautifying of cities. England however did not, so war broke out again on 16th May, 1803, the English Government engaging to pay an annual subsidy of £1,250,000 for every 100,000 men raised against France, provided that the total number was not

less than 400,000. Russia undertook to furnish 115,000, Austria 315,000 and Sweden 12,000.

Next followed Napoleon's scheme to invade England, and the rounding up of General Mack and 23,000 men at Ulm. He "took the surrender of the Austrian army on 20th October, 1805, standing in front of a big camp fire with his arms crossed behind his back. . . . He kept up a running fire of conversation with the Austrian officers, telling them that he had no quarrel with their Sovereign or their country, and that they had been acting merely as the cat's-paws of the London Bankers."

Nevertheless, the next day these gentlemen were able to turn the table on him, for, on 21st October, Nelson defeated Villeneuve off Cape Trafalgar.

Next came the overwhelming defeat of the Austrians at Austerlitz, on 2nd December; whereupon Prussia guaranteed to close the Elbe, Weser and Ems to British shipping. Lastly, on 17th July, 1806, Napoleon formed the States of Southern and Central Germany into the Confederation of the Rhine, and, on 6th August, he abolished the Holy Roman Empire.

In reply to the closing of the North Sea ports, England proclaimed a blockade of Prussia, and Sweden declared war on her. And whilst these various events were taking place, Napoleon, whose activity was ubiquitous, reorganized the financial system of France and became his own banker. Mr. McNair Wilson writes:

"In consequence, there was a rapid development of the natural resources of France and an equal rapid rise in the standard of living and in the wealth of the French people. The silk industry of Lyons was developed to make good the loss of cotton occasioned by the English blockade, while, under the direct guidance of the Emperor, the sugar-beet industry was established in order that the loss of cane-sugar might be compensated. Bi-carbonate of soda had formerly been imported into France. Imports had ceased. Napoleon offered a prize to any chemist who would show how this substance could be prepared from common salt. The famous process of Leblanc soon became available. Further, a substitute for indigo was evolved, and a substitute for coffee—namely, chicory—placed on the market."

Meanwhile, Frederick William of Prussia was intriguing with Alexander. This led to the reopening of the North Sea ports to British shipping, and to his annihilation at the battle of Jena-Auerstadt on 17th October, 1806.

At once Napoleon turned to his main and yet unsolved problem—the destruction of British credit by depleting the store of bullion in London, and to accomplish this task, on 21st November, he issued his Berlin Decree, by which England was placed under blockade and all commerce with her prohibited. This was his answer to George III's Order in Council of 16th May, 1806, by which a paper blockade of the coast of Europe from the Elbe to Brest had been declared. The object of the Berlin Decree was to compel Lombard Street to pay in gold for English imports of Baltic wheat. . . . "The Money-Power, in short, must be broken; peace with the world would follow, and in that peace he would show the world all the benefits and blessings of his new economic policy, so that, never again, would men allow themselves to be made the slaves of international bankers."

That this was so, may be judged from his own words. In 1812 he said: "The Continental System was none the less a great conception, and

destined to become a voluntary conception, the desire of all the peoples ; for it was as much to the interest of individuals as it was to the interest of the Continent as a whole. Prohibition against prohibitionists was common justice. Moreover, in his desire to establish on the Continent industries that would make it independent of England, he had had no choice of means . . . the system had built up the industries of France and Germany. It would therefore, he said, be a source of wealth which would replace the foreign trade which we were at present missing. In less than three years the Rhineland, Germany, the very countries which were most hotly opposed to the prohibitions, would do justice to his foresight and his achievements. To have taught the French and Germans that they could themselves earn the money which English industries had previously drawn out of the country was a great victory over the London Government. This revolt alone would immortalize his reign, through the internal prosperity it would bring to France and Germany . . . the power of France was, at that time, a state of affairs wholly advantageous to Europe, since it was the only way to check the excessive pretensions of England. England, he added . . . seized to herself alone all the benefits of industrial development. As an island, she doubtless excited less jealousy and anxiety in the minds of Governments that had no coast-line. Her maritime ascendancy seemed for this reason less burdensome to the Governments of Europe than the ascendancy of France. Her situation precluded the danger of territorial disputes with them. But her exclusive commercial policy was none the less damaging to individual interests. This fact was not willingly recognized at the present time because the various Governments found it convenient to go to London for subsidies when they wanted them ; and it mattered little to them if the cash they received came from the pockets of their subjects—or rather, had been earned at the expense of those subjects, whose industries would never be able to develop so long as the English monopoly continued."

England's counter-attack was immediate. On 7th January, 1807, an Order in Council was promulgated forbidding neutrals to trade between any two ports in possession of France or her allies under pain of confiscation of ship and cargo. In return, on 27th January, Napoleon published a decree ordering the seizure in the Hanse towns of English goods and colonial produce.

Meanwhile Alexander, the champion of the British credit system, refused to come to terms. Therefore, on 14th June, Napoleon smashed him in the battle of Friedland, whereupon peace was signed at Tilsit. The Baltic once again closed, Napoleon instructed Portugal and Denmark to deny their harbours to English ships. But England determined that the Danish fleet should not fall into French hands. A demand was made for its surrender. It was refused. Whereupon, without a declaration of war, Copenhagen was bombarded by the English, and forty-six ships of war were seized.

Between the date of the treaty of Tilsit and the crossing of the Niemen by the Grand Army in June 1812, we witness a continuous struggle between the Napoleonic and English systems. On the one side stands creative capitalism and on the other loan-capitalism. Whereas the latter demanded the liberty to establish international usury, the former was founded on the principle that no nation is a free people so long as another nation possesses the power to starve it into submission. Thus it came about that, as the Baltic

was once again closed and England and Russia were at war, Napoleon turned to the Mediterranean.

The Portuguese fleet escaping him, he placed his brother, Joseph Bonaparte, on the Spanish throne. This unpopular appointment, coupled with English gold, caused a widespread insurrection and brought Napoleon to Spain. In 1809, he returned to France, because, bribed by England, Talleyrand was preparing to organize a revolt. Raising a powerful army Napoleon marched against Austria, defeated the Archduke Charles at Eckmühl, and forced the Emperor Francis to sign peace at Schönbrunn on 15th October. Next he annexed Holland, which caused a severe slump in British trade, and by allowing the export of corn to England, subject to heavy duty, he rapidly depleted the hoarded gold in London, until, as Professor Holland Rose writes: "France alone had stores of bullion in the Bank." To break this grip, which was throttling the Money Power of London, Baring and his friends turned to Russia, seeing their only hope in their power to persuade Alexander to break away from the Continental System which was choking them to death. To this Napoleon countered by threatening to re-establish the Kingdom of Poland. He did not want war, London did, a war between France and Russia, and London won.

As early as the year 1810, Alexander had begun to weaken and accept English goods; at length he allowed six hundred English merchantmen, chased from the Baltic ports, to land their cargoes in Russia. Whereupon, in January 1811, Napoleon, in order to tighten up his blockade, annexed the duchy of Oldenberg, which greatly annoyed the Tsar, for its ruler was his uncle. Three months later Napoleon remarked: "War will occur in spite of me, in spite of the Emperor Alexander, in spite of the interests of France and the interests of Russia. I have so often already seen this that it is my experience of the past which unveils the future to me. . . . It is all a scene of an opera and the English control the machinery." Six years later he said to Las Cases: "Russia was the last resource of England. The peace of the world rested with Russia." And again: "English gold proved more powerful than my plans." So the situation worsened until, on 12th January, 1812, having entered upon a secret treaty with England, Alexander sent Napoleon an ultimatum demanding that the French troops should be withdrawn from the Russian frontier.

The rest is quickly told, so far as war is concerned. The disastrous Moscow campaign followed; yet, except for England, Russia, and Prussia, the greater part of Europe was still his; and were Prussia and Russia defeated, once again would England be at his mercy. Nevertheless, his enemy was not idle, and England yet again untied her purse-strings, granting a subsidy of £666,000 to Frederick William and another of £1,333,000 to Alexander, with an addition of £500,000 to keep his ports open. Then followed Napoleon's last German campaign in which, on 16th-19th October, 1813, he was decisively defeated at the battle of Leipzig.

"Crushed was Napoleon by the northern Thor"—so writes Lord Byron, in *Beppo*. London was illuminated, and every town and village lit its bonfire and burnt Napoleon in effigy as Guy Fawkes, whilst the Press vomited forth a cacophony never as yet heard . . . : "The First and Last, by the Wrath of Heaven, Emperor of the Jacobins, Protector of the Confederation of Rogues,

Mediator of the Hellish League, Grand Cross of the Legion of Horror, etc. . . . "According to General Dupont's statements, he commenced his career of murder at the age of sixteen, by poisoning a young woman, at Brienne, who was with child by him, etc." Yet the influences of this great Battle of the Nations were more notable than such ravings. They meant victory for the English System and the rise of Prussia.

In 1814 followed Napoleon's amazing campaign in France; his betrayal by Marshal Marmont, "*Mon enfant, élevé sous ma tante,*" as he said of him, and then exile in Elba. Escaping on 26th February, 1815, he landed in France, and for the first and last time in his life he borrowed £4,000,000 at eight per cent from "some houses in London and Amsterdam"; raised yet another army, and, on 18th June, lost it at Waterloo. Then St. Helena and immortality.

What this tremendous age, which centres on Napoleon, accomplished is only to-day becoming apparent. But first and foremostly was hatched from out its chrysalis a new faith called "Nationalism". This is what Professor Fisher writes :

"He is the herald of Italian unity; and, alike by reason of the things which he destroyed and by reason of the efforts which he provoked, he takes rank as one of the makers of Germany. For the old aristocratic federation of the Dutch he substituted the principles which govern the modern kingdom of Holland. It was one of his many policies to excite the national and inextinguishable aspirations of the Poles; and quivers of hope spread even to Serbs, Roumans and Greeks, communicated by the mighty movements of so many men, and the sudden catastrophe of such ancient things. If South American democracies value their independence, statues of the man who destroyed the prestige of the Spanish and Portuguese monarchies might be raised, without an excessive strain on historical propriety, in the squares of Valparaiso and Buenos Ayres."

Autocrat though he was, believing in individual rights, in private property and in public duties, he was also a *true* democrat. As Carlyle writes: "The Man was a Divine Missionary, though unconscious of it; and preached, through the cannon's throat, that great doctrine, '*La carrière ouverte aux talens*' ('the Tools to him that can handle them'), which is our ultimate Political Evangel, wherein alone can Liberty lie . . . call him, if you will, an American Backwoodsman, who had to fell unpenetrated forests, and battle with innumerable wolves, and did not entirely forbear strong liquor, rioting and even theft; whom, notwithstanding, the peaceful Sower will follow, and, as he cuts the boundless harvest, bless."

When at St. Helena he said to O'Meara:

"The system of government must be adapted to '*l'esprit de la nation*' and to circumstances. In the first place France required a strong government. While I was at the head of it, I may say that France was in the same condition as Rome, when a dictator was declared necessary for the salvation of the republic. . . . One of my grand objects was to render education accessible to everybody. . . . *My canaille* would have become the best educated in the world. All my exertions were directed to illuminate the mass of the nation instead of brutalifying them by ignorance and superstition. . . . These English who are lovers of liberty will one day lament with tears having gained

the battle of Waterloo. It was as fatal to the liberties of Europe as that of Philippi was to those of Rome."

Also to Las Cases he said :

"The impulse has been given, and I do not think that, after my fall and the disappearance of my system, there will be any other great equilibrium possible in Europe than the concentration and confederation of the great peoples. The first sovereign who, in the midst of the first great struggle, shall embrace in good faith the cause of the people, will find himself at the head of all Europe, and will be able to accomplish whatever he wishes."

This federation was to be attained not through force, but by a common economic system divorced from usury. As I have already shown, Napoleon would have nothing to do with loans, because they led to economic slavery and war. Because England was the champion of loan-capitalism, he had fought her. To Caulincourt he said, in December 1912, when travelling by sledge from Smorgoni to Warsaw :

"The good of that Europe which seems to envelop her (England) with good will counts for nothing with the merchants of London. They would sacrifice every State in Europe, even the whole world to further one of their speculations. If their debt were not so large they might be more reasonable. It is the necessity of paying this, of maintaining their credit, that drives them on. Later on, they will certainly have to do something about that debt. Meanwhile they sacrifice the world to it. The world will realize that in time : men's eyes will be opened, but it will be too late. If I triumph over them, Europe will bless me. If I fall, the mask of the English will fall soon after, and the world will see that they have thought of nothing but themselves ; that they have sacrificed the peace of a continent to their momentary interests."

No sooner had he fallen than his Empire was sacked by British Finance. The indemnity imposed upon France was 700,000,000 francs, to be paid in five yearly instalments ; also 150,000,000 francs as a "guarantee for the future", and yet another 150,000,000 francs a year for five years (actually three) to meet the cost of the army of occupation ; therefore in all £64,000,000. As France did not possess a tithe of such a sum, Ouvrard, the banker, proposed to borrow abroad in order to pay debt abroad : "No one in the world can at the present moment procure sixty millions for France," he said, "but the raising of a loan of a thousand millions, so that the claims of the Allies can be settled once and for all—that is child's play." The only firms which could negotiate such a loan were the Barings of London and the Hopes of Amsterdam, Alexander Baring being significantly known as "Alexander the Great".

On 8th January, 1817, the loan was floated, and without reference to the Rothschilds. Nevertheless, writes Mr. Paul H. Emden, in his *Money-Power of Europe*, they "made an enormous amount of money—perhaps more than anyone, if not out of the issue, yet out of the loan itself. They foresaw a huge success, had too much good sense to play the injured party, and consequently bought in enormous quantities everything that came on offer in the market . . . finally the proud combine was forced to realize that, by means of their holdings, it was Rothschild who now controlled the market. Thus they had shown what they were able to achieve single-handed, and how dangerous they might be as enemies." "France was followed by Prussia . . . and the first Prussian External Loan was effected in 1818 under Nathan Meyer

Rothschild's management. Then came Russia, Austria, Portugal and Spain. . . ."

Lastly, came Byron, to "blow the gaff".

"Who hold the balance of the world? Who reign
O'er Congress, whether royalist or liberal?
Who rouse the shirtless patriots of Spain?
(That make old Europe's journals squeak and gibber all)
Who keep the world, both old and new, in pain
Or pleasure? Who make politics run gibber all?
The shade of Buonaparte's noble daring?—
Jew Rothschild, and his fellow-Christian, Baring.

"Those, and the truly liberal Lafitte,
Are the true lords of Europe. Every loan
Is not a merely speculative hit,
But seats a nation or upsets a throne.
Republics also get involved a bit ;
Columbia's stock hath holders not unknown
On 'Change, and even thy silver soil, Peru,
Must get itself discounted by a Jew."

Thus came into being a new world of debt. Henceforth, within nations, industry and agriculture were more and more shackled to the banks, whereas the nations themselves became more and more the satrapies of international finance—that occult and omnipotent Dictator.

September 1939.

2

THE PRESS, THE WAR AND THE P.B.P.

THERE is a saying in the Gospel of St. John—"The truth shall make you free." It is the wisest of all sayings, because unlike a false thought a true thought is 'free from error ; therefore, all actions springing from it can be depended upon. For instance, because 150 years ago metallurgic and chemical thought was so full of errors, the true flight of a musket ball could only be predicted up to about 50 yards, whereas to-day, because much of this falsehood has been eliminated, the accurate flight of a rifle bullet can be depended upon for over ten times that distance.

"Propaganda," as Lord Ponsonby once wrote, "is as much a weapon of war as a gun"; therefore, surely the same rule should be applied ; for the freer from error our propaganda is, the more dependable it will be, and the more dependable it is, the more likely is it to hit the target. In other words: the more people as a whole are brought to realize the truth about the war—pleasant or unpleasant—the better are they placed to accept its risks, endure its consequences, and turn to their advantage the facts which truth reveals.

As one of the main objects in air warfare is so to terrorize the will of a

people that their government becomes inoperative, every nation has established an air defence service. Nevertheless, though a people can be terrorized and rendered demented as easily by word as by bomb, we have not yet tumbled to it, that it is for an identical reason the dictatorial nations have established a rigid control over their respective Presses.

Do I, then, advocate a similar control in this country? No, because a controlled Press, as we are only too well aware, does not necessarily mean a truthful Press, rather a Press in which lies are bred from pedigree stock instead of promiscuously. So long as truth is the aim, freedom of the Press is essential. But our Press is not free, for though its editors do not go out of their way to lie; because their newspapers have but one supreme object—namely, profit—and as the bulk of their readers is composed of the most ignorant and emotional of the people, they are compelled by circumstances to pander to that class. Therefore, for years now, every free Press has been proletarianized—that is, based on wishfulness instead of truthfulness, on credulity and not on fact.

I will now turn to the verbiage—it can scarcely be called news—on which the P.B.P. is regaled.

To begin with, I will take the case of enemy submarines reported sunk; an important piece of news, seeing that this war is largely a struggle between two systems of blockade.

About a month back we were informed by the German wireless that so far 11 U-boats had been lost, and by Mr. Churchill that we had sunk fifty per cent of the seventy in the possession of Germany at the outbreak of the war—that is, 35. Which is the correct figure? As it is impossible to say, I will accept the mean—namely, 23—as being nearest the truth. Nevertheless, a friend informs me that during this period (a little under six months) he kept careful check of the sinkings reported by the London Press, and that they totalled 233! From this one gathers—with reference to the mean figure—whereas Mr. Churchill's capacity for error is approximately 50 per cent, and Lord Haw-Haw's 100 per cent, that of the London Press is in the neighbourhood of 1,000 per cent!

Lying, or "error", should that word be preferred, is sometimes so ingenuous as to be barely believable. Here are two statements extracted from the same paper—the *People*—and on the same day!

"Stalin is using Hitler as a pawn. The pact between the two dictators was the result of no sudden swing-over in world affairs; it was engineered by Stalin, and was the fruit of years of political diplomacy and negotiation."

"The fact remains that Stalin is no more than Hitler's pupil in the vile arts of treachery and aggression, and, if you read the *People's* 'Secret Service' columns to-day you will realize that Hitler may be using him as a puppet with which to dupe the world."

Here we have Hitler as Stalin's pawn and Stalin as Hitler's puppet. Well may the P.B.P. be bewildered!

But, it may be observed, if accuracy of information is demanded, you must go to a higher class paper—say, *The Times*. Yet in it is to be found exactly the same balderdash. Here are two statements *printed in the same issue*:

"So magnificently are the Finns fighting that only a small diversion of

British and French resources should ensure their triumph in the air, and consequently their triumph in defence."

"Unless there is foreign intervention on a large scale, which seems impracticable, there seems little doubt about an eventual Soviet success."

This is rather like tipping the field all round for a winner.

How completely unreliable and ridiculously inaccurate and misleading our much vaunted free Press is, is only to be realized by those who examine it comparatively. To prove this I will here quote a conglomerate article on the action of the *Graf Spee* built up by a friend of mine from the information supplied at the time by eight leading newspapers. It reads :

"In a sinking condition (*Express*) the German pocket battleship entered Montevideo harbour limping (*Guardian*) at high speed (*Telegraph*) stern first (also *Telegraph*). The German raider crept (*Herald*) into the difficult port at midnight with all lights extinguished (*Telegraph*), her searchlights sending blinding beams across the water (*Herald*). Her injuries did not render her unseaworthy (*Herald*) as she was barely afloat and had many holes along her waterline (*Herald*, same page). Her guns had been put out of action (*Standard*), but there was no evidence to suggest that she was silenced before breaking off the fight (*Chronicle*). Transferred to barracks (*Standard*) the crew set to work with oxy-acetylene welders and rivets (*Express*) to push ahead with repairs they could carry out themselves (*Standard*). Finding great difficulty in effecting repairs owing to the refusal of local firms to provide material (*Chronicle*) the captain went off to the dockyards and bought large quantities of steel plate (*Express*). The pocket battleship was then ordered by the Uruguayan authorities to leave on Sunday at 5 p.m. (*Express*), 6.30 p.m. (*Mail*), 11.30 p.m. (*Telegraph*), and 2 a.m. (*Standard*). She was allowed to stay 24 hours (*Express*), 48 hours (*Herald*), 72 hours (*Telegraph*), and 30 days (*Chronicle*). Getting up steam on Sunday (*Referee*), the pocket battleship started her 54,000-h.p. Diesel engines (*Chronicle*) and put out to sea. With the 15-inch guns of the *Renown* threatening her (*Referee*) from Rio de Janiero (*Express*) she was scuttled outside the harbour by opening the seacocks (*Mail*) by the explosion of a large number of bombs placed in the hull fore and aft (*Telegraph*). The captain went down with her (*Herald*), and is being taken to Buenos Aires (*Telegraph*). Just before the *Graf Spee* was swallowed in the smoke of her burning, the great swastika battle flags could be seen through telescopes still fluttering from her mast-heads (*Herald*), having been blown away in the first explosion (*Express*)."

Well, this is the kind of "tripe" we have been fed on for over six months. And I for one cannot believe that it is helping us win the war. Much the reverse, because I fear that should it continue, there is every likelihood that the P.B.P., on whose will democratic government is supposed to depend, will so completely lose contact with reality, that soon they and their masters will not even know what they are fighting for, and that, therefore, the war will end in an aimless, senseless and maniacal turmoil in which, because the lie is triumphant, freedom will be trumpeted into anarchy.

The *Weekly Review*, 28th March, 1940.

VOLTAIRE'S TANK

VOLTAIRE was born in 1694 and he died in 1778, therefore he lived throughout the early years of the steam age. Yet it does not appear that he took much notice of it; for though the exact form of tank he had in mind is not known, as will be seen later on, it is certain that steam-power was not considered by him, and in spite of the fact that, in 1769, Cugnot, a Frenchman, built the first steam road-carriage. Nevertheless, historically, his idea is an interesting one.

It would appear that it first entered his head about 1741; because that year, in the *Dictionnaire Philosophique*, he mentions a "battle chariot", and the possibility of gaining battles by means of cannon alone. Yet nothing further is heard of this machine until 1756, when the Seven Years' War was declared and France was confronted by Prussia. That year, on 1st November, in a letter addressed to the Duke de Richelieu, after pointing out certain tactical changes in the Prussian army, he writes: "I am not of the military profession, but I believe that there is a weapon, a machine much more reliable, much more formidable, which in former days enabled battles to be gained with certainty." Then he goes on to inform the Duke that he has communicated his secret—"this elegant method . . . of how to destroy the human species"—to the Marquis de Florian, secretary to his niece, Madame de Fontaine, who has discussed it with M. d'Argenson, the Minister of War, and that a small model of it is being made, which will be shown to the King. Further, should it prove successful, "it will split people's sides with laughter, when it is discovered who is the author of this destructive machine".

Apparently, Florian was a firm believer in the idea, because in his letters Voltaire constantly calls him "Captain of the Chariots of War". Several are addressed to him, as also to the Duke and Madame de Fontaine, the correspondence beginning in March 1757. On the 6th of that month, in a letter to his niece, Voltaire once again mentions the war-carts. Apparently nothing as yet had been done, and M. d'Argenson is difficult, because Voltaire writes: "Everything new is rejected by the Minister." He further points out that secrecy is all-important, for "a new invention becomes useless once it is known". Next, in May, he writes to Florian: "My dear Superintendent of the Chariots of Cyrus. I forgot to mention to you that a small box on the cart with half a dozen double grenades in it would make a very convenient ornament. I—a peaceful scribbler—am ashamed to be thinking about destructive machines; but they are intended to protect honest people who fire badly against dishonest ones who fire too well. It will be discovered unfortunately and too late that there is no other expedient. . . ."

On the last day of that month another letter is addressed to Florian, and in reply to one apparently accusing Voltaire of communicating his secret to M. le Maréchal d'Estrées. He denies the accusation and suggests that d'Argenson is the culprit. Then he enters into some interesting detail, he says: "The cost of the cart will be next to nothing, it will require few men

and few horses. If unsuccessful it will not throw the line of battle into disorder even if the enemy's guns destroy all your chariots, which is most difficult. What will happen? They will provide you with a rampart, they will impede the forward movement of the enemy. In one word : *this machine can do a great deal of good and no harm whatsoever. I look upon it, after the invention of gunpowder, as the most certain instrument of victory.*" Next he goes on to say : "But, in order to grasp this project, active and ingenious men are required : men who are free from the gross and dangerous prejudices of the common kind. It is only by abandoning the normal way that the King of Prussia by carrying forward the food and forage of his cavalry in wagons, even before there was a blade of grass on the ground, was able from four directions to enter Bohemia and terrorize that country. Of a certainty *Maréchal de Saxe* would have made use of our chariots of war."

Obviously the idea was being ridiculed and opposed, and Voltaire was intent on defending it. On 18th June, seven and a half months after having first written to Richelieu, he wrote again. He informed him that he had given the drawings of the machine to Florian, who is convinced that "with six hundred men and six hundred horses on level ground one would be able to destroy an army of 6,000 men", and further, that a model of it had been made. To win Richelieu over he writes : "A man possessed of a routine type of mind, a man obsessed by ancient prejudices, accustomed to sharpshooting and ordinary methods is not for us. We require a man of imagination and genius—with him all is found. I understand well that it is not for me to mix myself up in how men can most conveniently be killed. . . . Yet, if a monk, with some charcoal, sulphur and saltpetre, was able to change the art of war throughout this evil world, surely then why should not a scribbler like myself render a small service incognito." He then goes on to say that an able officer, now dead, to whom he had communicated his secret, had informed him that [] would require fifty well-aimed guns to stop his machine. I had in my head what 100,000 Romans and 100,000 Prussians would not be able to resist. . . . Try, therefore, to see only two of these machines operating against a battalion or a squadron."

On 2nd July he sent Richelieu a flattering letter, and on the 18th he points out that the main difficulty in the adoption of his idea is, "that no general will dare to use it through fear of making a fool of himself should it fail. It is necessary to find a man of courage, who is not afraid of ridicule, who is mechanically minded and who is a lover of classical history." The next day another letter follows, in which Voltaire points out that wherever a squadron of cavalry can go, his machine (*ma petite drôlerie*, he calls it) can also go.

These letters, followed by several others, seem to have had little effect. Then the battle of Rossbach is fought, and back he returns to the charge. On 10th December he writes to Madame de Fontaine : "It would have been better, said your friend [Florian], to have advanced the Assyrian chariots over open country than to have allowed oneself to be slaughtered between two hills. . . ." Again, on 10th January, 1758 : "A thousand compliments to the Grand Equerry of Cyrus. In spite of what they tell us, our chariots would have been most useful against Frederick's cavalry." At length, on 26th May, 1760, he writes to Florian : "I am quite as annoyed as you, my dear Grand Equerry of Assyria, that they have not dared to try out my carts—fear of

looking ridiculous! Nevertheless, ridicule is not so much to be feared as the Prussians; and I am still convinced (though I am not a soldier) that this will be found the only way of defeating them in open war."

Nine years go by and nothing is recorded, when on 26th February, 1769, he addresses a letter to the Empress Catherine, then at war with the Turks, and attaches to it a paper on his *char de guerre*—written by Florian. From St. Petersburg she replied on 15th April: "Nothing proves to me so fully your sincerity towards myself that what you tell me of your newly invented war carts. But our warriors here are the same as in other countries: all untested novelties appear to them to be of doubtful value." On 27th May he wrote in answer: "I have seen again the former officer who proposed the use of the war carts during the war of 1756. The Count d'Argenson, Minister of War, carried out a trial with them. But this invention can succeed only in open country, such as that to be found round Lützen. . . . He still states that no more than a half a dozen of these chariots, advancing in front of a corps of cavalry or infantry, could overthrow the Janizaries of Mustapha, so long as there are no *chevaux de frise* in front of them. . . . Besides, it is said in a book which never lies, that Solomon had 12,000 war carts in a country which before his coming possessed asses only. And it is also recorded in the Book of Judges that the Lord was victorious in the valleys, because their inhabitants possessed chariots of war."

On 10th April, 1770, he again wrote to the Empress saying: "I am seriously of opinion that in the month of June the Imperial Army will find itself in the plains of Adrianople. I beg you to forgive me once again mentioning the chariots of Thomyris [the Scythian Queen who defeated Cyrus]. . . . *In no way do I belong to the homicide business; but yesterday two most excellent German murderers assured me that the effect of these chariots would be unquestionable in the initial battle, and that it would be impossible for a battalion or a squadron to resist the force and novelty of such an attack.* The Romans laughed at these war chariots, and they were right, because they are no more than a foolish jest when one is accustomed to their use. But the first appearance most certainly should create terror and disorder. Besides, I know of nothing less costly and easier to handle. One trial with this machine supported by three or four squadrons only might do much good without any inconvenience.

"No doubt it may appear that I am mistaken, because the opinion held in your court is hostile to me. Nevertheless, I ask for one reason against my invention. As for myself, I simply cannot see one.

"Please, therefore, once again examine this question. I speak solely of the most knowledgeable officers. They say that only *chevaux de frise* can render this manœuvre useless. As regards cannon, the risk is the same on both sides, but in each squadron the only risk of loss is two small carts, four horses and four men."

What was Voltaire's invention? There can be little doubt that it resembled the Scottish War Cart of 1456, described by Francis Grose in his *Military Antiquities*, Vol. I, p. 388. We know that it was moved by two horses and that its crew was two men. It was, therefore, a smaller vehicle than its Scottish ancestor, and probably the first two-man tank ever devised.

That it was only suitable for level ground is acknowledged; therefore its limitations were considerable. It was a great idea born before its age. Yet

when, some hundred and fifty years later, its age dawned, its adoption was as strongly opposed as in 1757 and 1769. This, then, is the most interesting conclusion that we arrive at: inventions come and go, but military opacity remains constant.

The Spectator, 4th October, 1940.

4

MECHANIZATION TWO THOUSAND YEARS AGO

MOTORIZATION is ultra-modern; mechanization is ultra-old. The first came into military being during the last war; for though railways, by facilitating supply, led to a vast increase in the size of armies, it was not until the introduction of the internal combustion engine and its application to road, field, and above all to air transport, that tactics were radically changed.

The second dates from the introduction of war engines which could be operated without the expenditure of human or animal energy (muscle-power), such as the *ballista* and catapult, the ancestors of the gun and the howitzer; for the first was used for low- and the second for high-angle fire.

Because the governing idea behind these engines is to increase the hitting range, their origins must be sought in such instruments as the sling, spear-thrower, bow and blow-pipe, the last-mentioned being nothing other than an air gun. Of these weapons the bow is known to date back to palæolithic times, for two distinct types are depicted in the Spanish cave-paintings of 10,000 years ago.

All war engines may be classified under the general term of "artillery", and an essential fact to note is that, whereas thrusting and cutting weapons, frequently also slings and bows, are the weapons of field men, artillery is the weapon of city dwellers, because these folk are less brawny than peasant soldiers, live behind walls, are imbued more highly with a defensive spirit, and above all possess both the wealth and leisure so necessary for the invention of costly and complex war machines.

Jerusalem, Tyre, Carthage and Syracuse, all wealthy cities, produced artillery in abundance. After Alexander the Great seized the treasures of Persia, and his successors scattered their hoards of gold, Alexandria is added to these cities, and so also is Rome, once the Romans laid hands on the wealth and trade of the East. Later on, the same development is witnessed in Europe. The increasing wealth of the thirteenth and fourteenth centuries gave rise to the general adoption of cannon in the fifteenth; and, in more recent times, the increasing wealth of the eighteenth century led to the Industrial Revolution, which has since been followed by an enormous development of all manner of projectile-throwing weapons, until we arrive at the present day bomber aeroplane with an effective range of over 2,000 miles and carrying bombs of 12,000 lb. in weight.

The origin of artillery among the Greeks must be sought in Sicily about the year 400 B.C., at which date the tyrant Dionysius made use of *ballistæ* and catapults in large numbers. From Syracuse, about the middle of the fourth

century B.C., these weapons were introduced into Greece, and though the Spartan Archidamus exclaimed, "O Hercules, the valour of man is at an end," they were at once adopted by that exceptionally broadminded soldier Philip of Macedon. Alexander the Great, his son, not only made extensive use of them in his many sieges, especially in that of Tyre, but employed them as true field artillery and also as ships' "guns".

As I have mentioned, the enormous hoards of gold seized by Alexander were put into circulation rather than squandered in the civil wars following on his death, and went far to establish the three great dynasties of the Antigonids in Greece, the Seleucidæ in Syria and the Ptolemians in Egypt. With these dynasties there came into being a rich, commercial and highly industrialized civilization known to history as the Hellenistic.

As civil life changed, so did the character of war, and though the records of this epoch are scanty, sufficient has survived to show a steady increase in the use of projectiles, until battles became markedly modern.

From this date we enter the epoch of the great Hellenistic cities, highly commercialized and industrialized, such as Alexandria, which became the London or New York of its day. In them gold-power was transformed into brain-power, and in these warring times brain-power turned to military mechanization.

In the hundred and fifty years which followed the death of Alexander, the progress in mechanics was unrivalled for nearly 2,000 years. We still have accounts of the engines invented by Heron, 150 B.C., Philo, about 175 B.C., and Agesistratus, of the same date, who tells us that the artillery of his day could fire missiles up to a range of 800 yards. Dionysius, an Alexandrian, invented a *polybolos*, a machine-gun from which a succession of arrows were fired from a magazine. And Ctesibius, another Alexandrian engineer, discovered a means of gearing to the bow arms of *ballistæ* pistons working in "carefully wrought cylinders" which were filled with compressed air.

At the battle of Mantinea, 207 B.C., Machanidas, the tyrant of Sparta, advanced with a large number of "carts carrying quantities of field artillery and bolts for the catapults"; but Philopœmen, the Achæan general, seeing that the enemy's plan was "by pouring volleys from the catapults into his flanks, to throw the ranks into confusion", brought forward his light cavalry and charged the engines.

In the Roman world a similar change set in, mainly through contact with Carthage and Syracuse. At the siege of the latter, in 214 B.C., Archimedes, the greatest engineer of his age, astonished the Romans. Polybius said of him: "In certain circumstances, the genius of one man is more effective than any number whatever." And Plutarch wrote: "... all the rest of the Syracusans were no more than the body in the batteries of Archimedes, whilst he was the informing soul. All other weapons lay idle and unemployed, his were the only offensive and defensive arms of the city . . . At length the Romans were so terrified that, if they saw but a rope or a beam projecting over the walls of Syracuse, they cried out that Archimedes was levelling some machine at them and turned their backs and fled."

These appreciations are worth a moment's thought, for it is seldom realized that in the art of war, as in all other arts, the artist himself is the supreme factor, and after him come his tools or weapons. The combination of these

two—the intellectual and the physical—has never failed to raise war to a high level. We see this in the campaigns of Alexander the Great, and once again during the siege of Syracuse, but with this difference: Whereas Alexander is a soldier, Archimedes is a civilian; the genius of the one manifests through the use of weapons, and of the other through their invention.

The point to note here is, and we do not clearly see it again until during the Industrial Revolution, that directly projectile weapons become superior to shock weapons, more and more is the power to wage war influenced by the civil inventor, by science and by industry, instead of by the soldier and his tactics.

The result of this is, first that generalship is apt to fall behind inventiveness, and secondly that fighting power becomes more and more dependent upon inventions and industry, until to attack the sources of the enemy's military power is even more important than attacking his armies. Thus, through the improvement of weapons, the object of battle is shifted from killing soldiers and so unshielding the civil will, to killing, or terrorizing, civilians in order to deprive an army of its economic as well as its moral foundations.

Increase in numbers of mechanical weapons is clearly seen from the opening of the second century B.C. In 146 B.C., when Carthage surrendered, her citizens delivered up to the Romans 2,000 catapults—that is, ten to every 1,000 foot or horse soldiers. From then on we find a steady increase in artillery in the Roman armies, until at the opening of the Christian era every cohort was equipped with one catapult and every century with one *carroballista* (a field-piece mounted on a carriage), eleven soldiers being required to work this engine. Therefore a legion was equipped with an artillery train of 60 *carroballistæ* and 10 catapults—that is, 60 field guns and 10 howitzers. This corresponds closely to the number of guns in a division of a few years back.

This astonishing progress from push of pikes to long-range fighting led to a deterioration of Greek and Roman morale. Not because increased weapon power necessarily decreases the offensive spirit, but because the difficulty in moving the war engines reduced mobility and so rendered war more and more defensive in character. This defect remained constant until the advent of motorization, the ability to move weapons without the expenditure of human and animal energy.

Evening Standard, 12th December, 1943.

5

THE CONQUEST OF THE AIR

Forty years ago, on 17th December, between 10.30 o'clock and noon, at Kill Devil Hill, Kitty Hawk, North Carolina, an event took place which was destined to change world history; it was the conquest of the air by the Wright brothers.

Sons of an American clergyman, Wilbur Wright was born in 1867 and Orville in 1871. Their first enterprise was a printing business; later they set up as bicycle manufacturers, and were thus engaged when, in 1896, Otto Lilienthal, a noted German aeronaut, met his death in a glider accident in

Germany. This mishap so roused their interest in flying that they set about studying all obtainable literature on the subject.

Soon it struck them that the heart of the problem lay in adequate practice. "We figured," wrote Wilbur, "that Lilienthal in about five years of time had spent about five hours of actual gliding through the air. . . . It would not be considered at all safe for a bicycle rider to attempt to ride through a crowded city street after only five hours' practice, spread out in bits of ten seconds each over a period of five years. . . ."

Having patiently codified all obtainable data, and having carefully studied the flight of birds, more particularly of buzzards, in October 1900, at Kitty Hawk, the brothers began experimenting with man-carrying kites. Next, in 1901, they built a glider very similar to the one used by Lilienthal, but on a larger scale. Though with this machine they found it quite easy to make glides of over 300 feet, they came to the conclusion that the calculations upon which flying machines had so far been designed were quite unreliable. As Wilbur later on wrote :

"Having set out with absolute faith in the existing scientific data, we were driven to doubt one thing after another, till finally, after two years of experiments, we cast it all aside and decided to rely entirely on our own investigations. Truth and error were everywhere so intimately mixed as to be indistinguishable. . . . We had taken up aeronautics as a sport. We reluctantly entered upon the scientific side of it."

This they did during the winter of 1901-1902. They built a wind tunnel in which they tested a large number of wing surfaces, and from the experiences gained they built a new glider, to which was fitted a fixed, vertical tail, in order to improve lateral balance.

With this machine they returned to Kitty Hawk in the autumn of 1902. The first trials were disappointing, and mainly because the fixed tail or rudder made it all but impossible to counteract a sideways tilt. To remedy this they made the tail adjustable, when the glider was found to be far more amenable to management.

In form it was a biplane, with wings 32 feet in span and five in depth. The pilot lay horizontally across the middle of the lower plane. In front projected a "horizontal rudder" with a sustaining area of 15 square feet, and in rear the "vertical rudder" had an area of six square feet. Skids formed the undercarriage. The weight of the machine, less the pilot, was 116½ lb.

With this machine the brothers made nearly 700 glides, flying in calms and in winds of as high a velocity as 35 miles an hour. Of these flights Wilbur wrote :

"This was the first time in the history of the world that a movable vertical tail had been used in controlling the direction or the balance of a flying machine. It was also the first time that a movable vertical tail had been used in combination with wings adjustable to different angles of incidence, in controlling the balance and direction of an aeroplane. We were the first to functionally employ a movable vertical tail in a flying-aeroplane. We were the first to employ wings adjustable to respectively different angles of incidence in a flying-aeroplane. We were the first to use the two in combination."

Having now devised a controllable glider, the next problem was to supply it with adequate motive power. As no suitable petrol engine existed, the

brothers spent rather more than twelve months in building one in their cycle factory. It was a light, simple 4-cylinder unit, developing from 12 to 15 horse-power.

Lastly came the question of designing the propellers. "What at first seemed a simple problem," wrote Wilbur, "became more complex the longer we studied it. With the machine moving forward, the air flying backwards, the propellers turning sidewise, and nothing standing still, it seemed impossible to find a starting-point from which to trace the various simultaneous reactions."

However, after several months' work this final problem was solved. The propellers were built entirely from calculations, and gave in useful work 66 per cent of the power expended.

All now being ready, 17th December, 1903, was fixed as the date of the trials, and an invitation to be present at them was extended to the inhabitants of the district. The morning however was so cold and the wind so biting that only five spectators turned up. Their names are worth recording, they are—Messrs. A. D. Etheridge, W. S. Dough, W. C. Brinkley, J. Ward and J. T. Daniels; for as these five men trudged over the frozen sand dunes that winter morning, their names became part of world history.

As the wind was blowing half a gale, the brothers waited until 10 a.m., hoping that it would drop. Then they decided to delay no longer.

The machine was brought out of its shed and placed on a trolley which ran along a 70-foot track, the initial acceleration being obtained by means of a heavy weight dropped from a portable tower.

Orville got into the aeroplane; the engine was started; the two propellers began to revolve; the weight fell, and, as the machine glided forward, Wilbur ran at its side holding on to one of its wings in order to balance it. After a forty-foot run it lifted.

"The course of the flight up and down was exceedingly erratic," writes Orville. "The control of the front rudder was difficult. As a result, the machine would rise suddenly to about ten feet, and then as suddenly dart for the ground. A sudden dart when a little over 120 feet from the point at which it rose into the air ended the flight. This flight lasted only 12 seconds, but it was nevertheless the first in the history of the world in which a machine carrying a man had raised itself by its own power into the air in full flight, had sailed forward and without reduction of speed, and had finally landed at a point as high as that from which it started."

Three further flights followed, the second and third very similar to the first. Of the fourth Orville informs us:

"Wilbur started the fourth and last flight at just 12 o'clock. The first few hundred feet were up and down as before, but by the time three hundred feet had been covered, the machine was under much better control. The course of the next four or five hundred feet had but little undulation. However, when out about eight hundred feet the machine began pitching again, and, in one of its darts downwards, struck the ground. The distance over the ground was measured and found to be 852 feet; the time of the flight 59 seconds."

Thus was the conquest of the air achieved. And when, at some time after noon, the five spectators trudged back over the windswept dunes to their

homes, little did they imagine that they had witnessed the most portentous mechanical event since the invention of the steam engine.

The air had been conquered: the story of Dædalus and Icarus had come true; Pegasus had been given wings of fire, and the chariot of Phaëton had become a reality. The five spectators went back to their dinners. No single reporter had been present. No single newspaper mentioned the event. Nevertheless, between 10.30 and noon that cold winter morning, the axis of the civilized world was shifted, for a new dimension had been given to human movement.

Evening Standard, 14th December, 1943.

6

A SURPRISING CHRISTMAS

WHEN we contemplate the stupendous battles fought or being fought; battles involving millions and resulting in scores of thousands of casualties, we are apt to forget that, almost without exception, the most fateful in our Imperial history were won or lost by minute forces of men.

Thus to take two which readily spring to mind, the battle of Plassey, which decided whether the French or ourselves were to gain superiority in India, and the battle of the Plains of Abraham, which once and for all settled whether Canada was to be French or British, were each fought and won by what to-day would represent a brigade.

Stupendous though the influences of these two battles were, in historical importance neither the one nor the other, nor even both together, rivalled two yet smaller engagements which constituted the turning-point of the War of the American Rebellion. A war which not only decided whether the southern half of North America was to be a British possession or give room to an independent nation, but which also determined the course of world history from 1783 onwards.

Not only did that war knock the bottom out of the autocratic conception upon which colonial empires were then founded, but its ideals went far to fertilize the French Revolution; therefore the Napoleonic Wars, the rise of Prussia, the Franco-Prussian War, the First World War, and consequently also the present war; a war in which, so far as eye can see and thought can judge, fate and circumstances have determined that the America we lost 160 years ago is going to decide the issue. This sequence of events is so remarkable, so enormous in its "shunless destiny" that a brief account of the first of these two minute battles cannot be other than full of interest.

During the second half of the year 1776, the American position was desperate. So desperate it seemed that nothing short of an act of God could remedy it. Washington's army was little more than an armed rabble. His continental (regular) troops were raised on a twelve months' enlistment, and his militia was utterly unreliable. Of them he wrote: "They come in you cannot tell how; go out you cannot see when; act you cannot tell where; consume your provisions; exhaust your stores; and leave you at last in a critical moment."

In August, Sir William Howe, the British Commander-in-Chief, landed on Long Island and there gave Washington a sound drubbing. Next, Howe transferred his army to Manhattan Island, beat Washington again, and, on 15th November, by storming Fort Washington inflicted a crushing defeat on the Americans.

With all speed Washington withdrew his now completely demoralized army south of the river Delaware, to find that it had melted away to a residue of 3,153 officers and men, whose enlistment was due to expire at the end of the year.

As Washington fell back, Howe's advance, under Lord Cornwallis, pressed forward. On reaching the Delaware and having no pontoons with him, Howe decided to halt until that river was frozen, when it would be unnecessary to bridge it. So he ordered his army to go into winter quarters, and, to protect its cantonments, he drew around them a line of posts, in all some eighty miles in length.

The weakest point in this overlong line was the village of Trenton, held by a brigade of Hessians, some 1,500 strong, under Colonel Rall, a brave but stupid soldier, who, when urged to entrench his position, replied: "We want no trenches. We will go at them with the bayonet."

Meanwhile, Washington's situation was daily growing worse. So much so that, on 17th December, he wrote to Congress: "In short, your imagination can scarce extend to a situation more distressing than mine. Our only dependence now is upon the speedy enlistment of a new army. If this fails, I think the game will be pretty well up."

Nevertheless, Washington was not one to sit still. Learning from a spy of Rall's precarious position, and knowing that after the middle of January the Delaware would be frozen, on the 23rd he determined to strike. That day he wrote to his Adjutant-General, "... Christmas day at night, one hour before day, is the time fixed for our attempt on Trenton. For Heaven's sake keep this to yourself . . . necessity, dire necessity, will, nay, must, justify my attack."

On Christmas Eve the final plan was agreed upon. Three columns were to be employed: 2,000 men under Colonel Cadwalader to cross the Delaware and distract the British reserves at Bordentown; 1,000, under General Ewing, to cross at Trenton Ford and cut Rall's line of retreat, and 2,400, led by Washington, to cross the Delaware nine miles above Trenton and then move on that village in two columns, one under General Nathaniel Greene by the Pennington Road, and the other by the River Road under General John Sullivan.

At two o'clock on Christmas afternoon, Washington set out, and by sunset reached the Delaware. The night was pitch dark, the weather frightful, a blizzard of rain and snow beating down on his half-frozen men. The river was found to be full of block ice. Then came the paralysing news that neither Cadwalader's nor Ewing's columns had been able to cross the river. Nevertheless, Washington determined to push on, and in spite of the fact that the terrific weather had already delayed his advance by four hours.

That night Rall sat up late over a game of cards; drank heavily, and in the early hours of the 26th retired to rest.

At eight o'clock that morning, Lieutenant Wiederhold stepped out of his

quarters on the Pennington Road, and saw some 200 men emerging from a wood. They were Greene's advanced guard. Next, the head of Sullivan's column appeared, and by the time Rall had been awakened by the firing and had flung on his uniform, Trenton was enveloped on its northern and western flanks.

Rushing out of his quarters, Rall ordered his own regiment to fall in along King's Street, Lossberg's to clear the north of Queen Street, and Knyphausen's to face Sullivan. But before these orders could be carried out, Colonel Harry Knox—Greene's chief gunner—brought up his leading battery and opened fire. Whereupon, under cover of the cannon smoke, the American sharpshooters rushed the houses—where they could keep the pans of their muskets dry—and opened fire on their disorganized enemy.

Though this fire caused the Knyphausen regiment to break back in rout, Rall, a staunch fighter, did not lose his head. Seeing that it was impossible to maintain his position in the street, he withdrew the Rall and Lossberg regiments into the fields to the east of the houses and ordered a bayonet charge; for the sleet and the rain prevented his men from using their muskets. Whilst urging them on he was struck by two bullets and rolled from his horse mortally wounded.

The end now came quickly. Knox, once again hurrying forward his cannon, opened fire. The Hessians lowered their standards and grounded their muskets, whereat the Americans tossed their hats into the air and a great shout resounded over the battlefield.

The action had lasted for no more than thirty-five minutes. The American losses were two officers and one or two private soldiers wounded, and the Hessians between 20 and 30 killed and wounded and 909 made prisoners.

Though these losses are insignificant, the influence of this victory, coupled with that of Princeton—a somewhat similar engagement, won by Washington on 3rd January—were prodigious. At once the spirit of the Revolutionists revived. Washington was hailed as a Camillus, a Fabius and a Hannibal. Everywhere there had been despair, now everywhere there was hopefulness.

Though the Americans were still to be faced by many ups and downs, their course towards final victory was set; a victory gained by Washington and Rochambeau at Yorktown, on the Chesapeake, on 17th October, 1781, which virtually ended the war.

On the night of that famous capitulation, at a dinner given by American Headquarters, Lord Cornwallis, in response to a toast proposed by Washington, said:

"When the illustrious part that your Excellency has borne in this long and arduous contest becomes matter of history, fame will gather your brightest laurels rather from the banks of the Delaware than from those of the Chesapeake."

True as this must have seemed to many present, no one in that historic gathering of victors and vanquished dreamed that, on the day those laurels were gathered, the axis of the world was changed.

Evening Standard, 22nd December, 1943.

IS THE BOMBER DOOMED?

MAN's propensity for destruction would seem to be unlimited. In the last war it was the artillery battle; in this war it is air bombardment. By means of the one he obliterated entire battlefields, and by doing so denied to himself all possibility of exploiting the initial success gained by becoming bogged in the slough he created. By means of the other he has annihilated great cities and vast industrial areas, and in consequence has pulverized the very foundations upon which eventual peace must one day be built.

Looking back on the last of the great artillery battles, that of Passchendaele, fought in 1917, we stand aghast and wonder at such folly. Possibly the day will dawn when, freed from war psychosis, we shall once again do the same and wonder as we contemplate the ruined cities of the world.

Though the means of war vary, the idea behind them remains constant. It is, destroy! destroy! destroy! Nor can it be said that the means we now rely on are more economical than those of the last war. In fact they are vastly more costly, complicated and cumbersome, as a comparison between the gun and shell and the bomber and the bomb will show.

The gun is a stationary weapon, and from the position it occupies it can fire for hours, days and even weeks on end. Its wear and tear is slight. It is an accurate weapon, and the risks of it being hit and put out of action are small. Its ammunition can be dumped alongside it in large quantities, and the cost of each discharge is limited to the value of the explosive used and such depreciation as it causes to the gun.

The bomber can operate only when in movement. The risk of it being put out of action is considerable. It may take several hours before it comes within range of its target. Its bomb load is limited, and once expended the machine must return to its base to reload. It is not an accurate weapon, and therefore must be used in large numbers, and the cost of each load discharged includes besides the wear and tear of the machine, which is considerable, the value of the petrol and oil burnt, which may amount to several thousands of gallons.

Nevertheless, the two great advantages of the bomber over the gun are: (1) Vastly increased range, and (2) greater projectile power. And, so long as these hold good, for distant bombardments and rapid destructive effect, the gun will remain outclassed. In range, it simply cannot compete.

Suppose, however, it were possible to invent a gun which possessed these characteristics. Suppose it could fire a shell as large as the heaviest bomb, at a range equivalent to that of the biggest bomber ever likely to be built, and with identical accuracy of aim, would not the bomber be at once outclassed?

Certainly! There can be no doubt as to this, because such a weapon would be out of all comparison less clumsy, costly and complicated. Further, as shells in any quantity could be dumped alongside it, during days and weeks on end an unbroken stream of projectiles could be directed on the target.

In embryo such a weapon exists to-day—it is the rocket-bomb.

Though the most ancient of all military explosive contraptions, for gun-

powder was used in rockets to scare mounted troops with long before the earliest musket or cannon was invented, in its modern form the war-rocket is still in its cradle, and, strange to say, has been slumbering there ever since 1804.

That year it occurred to the inventive mind of Major-General Sir William Congreve that the rocket of his day could be converted into a formidable weapon of war. So he set to work to devise the first modern war-rocket. Two years later it was used in the bombardment of Boulogne, when, as he wrote: "In less than ten minutes after the first discharge, the town was discovered to be on fire."

Of it he prophetically said: "*The rocket is, in truth, an arm by which the whole system of military tactics is destined to be changed.*"

Though the range of the Congreve rocket was no more than 3,000 yards, to-day experts inform us that, should two difficulties be overcome, there is no theoretical reason why a rocket could not be constructed to travel faster than any shell, and therefore incomparably faster than an aeroplane, from Berlin to London or from London to New York.

These two difficulties are motive power and maintenance of direction. Should they be solved, as they undoubtedly will be, for the inventive genius of man would seem to be unlimited, then it will be possible to fire upon targets at any range—round the entire globe if need be . . . possibly to the moon!

The simplicity and economy of such a projectile over all air-transported bombs is self-evident. Like a shell, it can be fired from a stationary position at any range and in any quantities. It can be made of any size, up to hundreds of tons in weight, and without requiring a complicated piece of machinery such as a cannon to fire it, or a still more complicated one—the aeroplane—to transport it to its target. Being manless, casualties are vastly reduced, and as the trough or cradle from which it is launched can, if so desired, be placed hundreds of feet under the ground, the likelihood of a rocket battery being silenced or destroyed by rocket or other fire is infinitesimal.

Certainly, as the following quotation shows, so long ago as 1935 a glimpse of this truly appalling instrument of annihilation scintillated in many minds. That year an American rocketeer wrote:

"There is no possible doubt that militarists all over the world, with the possible exception of England, are fully alive to the tremendous possibilities of the rocket in modern warfare, and in the next war it will inevitably follow that rocket propulsion will be developed to the fullest extent of its destructive power, just as happened in the Great War with the aeroplane."

Though this is improbable, for it generally demands, as it has with the aeroplane, the tests and trials of at least two wars as well as the intervening peace interval to bring a novel weapon to maturity, there can be no doubt whatsoever, now that the rocket-bomb is an accomplished fact, that it will steadily be improved.

After all, the aeroplane—the dominant weapon of the present war—is no more than forty years old. And when we look back upon the machines which took to the air in August 1914, and compare them with those which to-day rain ruin on Berlin and other cities, it demands no great flight of imagination to picture as rapid an evolution in the rocket-bomb during the next thirty years.

Self-evidently such an evolution carries with it the doom of the bomber

as a piece of long-range artillery, and probably also the doom of the cannon in most of if not in all its many forms.

A method of attack will then be introduced which will enable one nation to wage war against another, a war of maximum annihilation, without moving a man or a machine.

All one can pray for is that man having devised so annihilating a weapon, against which, so far as can be seen, no defence is possible, the absolutism of the attack will open his eyes to the madness of his actions. Instead of squandering his God-given genius in devising newer and more powerful means of destroying his kind, will not he see how infinitely more profitable it would be for him and the world at large, were he to direct that genius towards creative ends, and thereby fashion a state of international peacefulness in which the memories of absolute war will fade into oblivion like an evil dream?

Evening Standard, 4th January, 1944.

8

THE RULES OF WAR

LIFE without rules is an anarchy, hence, as order is essential to human society, among even the most primitive peoples are to be found taboos and tribal customs, and, as civilization advances, laws, ethical codes and religious sanctions are established, the aim of which is to restrict the beast within man. Therefore, as war is an activity of life, it appears to me that Mr. Bernard Shaw is supremely right when he says, as he recently has done, that "War without chivalry [that is, without rules, without laws of war] reduces itself to an absurdity like all-in wrestling, which, as experts know, is a sham."

Many will object to this, because their emotions have so blotted out their reason that they look upon war as an end in itself—an act of vengeance or of stice—and not as a means towards an end—a more contented peace. Stranger still, though not a few of these people consider themselves Christians, they, nevertheless, look back upon the ages in which the Church genuinely attempted to restrict war by rules as profoundly barbaric.

Notwithstanding, the Medieval Church was wiser than the politicians of to-day. It held that man was born in original sin. In other words, that he is animal as well as human, and as a French poet has written: "*Le vieux sang de la bête est resté dans son corps*" (The old blood of the beast remains in his body). Therefore it held that though war could not be eliminated, as it was part of man's very nature, it must be restricted by rules and sanctions like all other human activities.

The first step towards this end was the establishment of "The Peace of God" (*Pax Dei*), which is first heard of in the year 990. Its aim was to protect ecclesiastical buildings, clerics, pilgrims, women and peasants from the ravages of war; also cattle and agricultural implements. The second step was "The Truce of God" (*Treva Dei*) initiated by the Synod of Elne in the year 1027. According to it all warfare was suspended from noon on Saturday until dawn on Monday. Later, this truce was extended from Wednesday evening to Monday morning. Later still, in 1095, at the Council of Clermont, Pope

Urban II—the initiator of the Crusades—“proclaimed a weekly truce for all Christendom, adding a guarantee of safety to all who might take refuge at a wayside cross or at the plough.”

The means of enforcing this truce were religious sanctions—excommunications, interdict, etc.—and though the results were meagre, these sanctions did effect something, for in the eyes of Christendom they at least branded the aggressor as the culprit.

A collateral restriction arose out of the Feudal System. It also took two forms. The first was that war was restricted to the nobility, and hedged in by codes of honour, and the second was the introduction of ransom: the price for which a prisoner redeemed his life or freedom; a city secured immunity from sack and a ship was repurchased from her captors.

The right of ransom was recognized by law. Not only did it diminish the ferocity of medieval warfare, but it grew into a veritable trade, until in fifteenth-century Italy the hope of gaining ransom all but reduced fighting to a farce.

These various restrictions, as well as the economic conditions of the day, definitely limited the ravages of war. So much so that, in this present age of unlimited destruction, the following ordinances of our own Henry V—not exactly a mild warrior—sound foreign to our ears.

“That no manner of man be so hardy as to go into any chamber or lodging where any woman lieth in childbed, in order to rob her, or pillage any goods belonging to her refreshing, nor make any affray whereby she or her child be in any disease or danger.”

“That no manner of man be so hardy to take from no man going to the plough and harrow, cart, horse, nor ox nor none other beast belonging to labour without payment and agreement.”

“That no manner of man beat down housing to burn, nor no apple trees, pear trees, nuts, nor no other trees bearing fruit.”

Such ordinances were generally observed until the breakdown of Papal authority during the Wars of Religion, which raged throughout Western and Central Europe in the sixteenth century, to culminate in the ferocious Thirty Years' War (1618-1648).

“Do you think my men are nuns?” cried Tilly, and 30,000 people are butchered in Magdeburg. Worse still, the common folk were dragged into the conflict by violent propaganda, until they “came to believe it a sacred duty to kill their enemies for the purification or preservation of the true religion, as the case might be.”

The appalling conditions created by this war forced the statesmen and soldiers of the eighteenth century to revert to restrictions. Then, once again, the masses of the people were neutralized and seldom interfered with. Bloody encounters were normally avoided, and, according to the rules of the “game” neither justice nor right, nor any of the great passions were to be mixed up with war, because the bullet is no answer to an idea, and, should it be considered as such, there would be no termination to a war other than total collapse or mutual exhaustion.

With the coming of the French Revolution all was once again changed. Conscription was introduced, mass armies were raised and their dividends

were mass massacre and mass conquest in the name of Liberty, Equality and Fraternity.

Once the Napoleonic Wars ended, a reversion to playing the "game" according to rules was made. In 1832, at the siege of Antwerp, we find Marshal Gérard and General Chassé arranging between themselves how the one should bombard the other with a minimum loss to the citizens of Antwerp. The result was that "not a single non-combatant beyond the lines was harmed in person or property." Again, so late as 1859, when his army was defeated at Solferino, we find the Emperor Francis Joseph saying: "I have lost a battle. I will pay with a province," and by so deciding he spared Europe a general conflict.

Nevertheless, the rapid development of democracy brought with it a steady loosening of the restrictions of war. One man one vote soon meant one man one rifle. Thus a return to mass warfare set in.

Ruskin, voicing medievalism, attacked this in his famous lecture to the Woolwich cadets in 1865. He said: "If you, the gentlemen of this or any other kingdom, choose to make your pastime of contest do so and welcome; but set not up . . . unhappy peasant pieces upon the chequer of forest and field. If the wager is to be of death, lay it on your own heads, not theirs. A goodly struggle in the Olympic dust, though it be the dust of the grave, the gods will look upon and be with you in; but they will not be with you, if you sit on the sides of the amphitheatre, whose steps are the mountains of earth, whose arena its valleys, to urge your peasant millions into gladiatorial war."

All but simultaneously the first of the Geneva Conventions was held, to elaborate a code of rules whereby the ravages of war might be mitigated. Yet to no avail, for in 1914, like wrack, the common people, though individually they had not the slightest wish to fight, were by propaganda driven over the shore-line of war. So again in 1939.

To fire popular energy hate of the enemy is invoked; the most infamous aggression becomes the most sacred of causes; innocent Right clinches with unutterable Evil, just as it did during the Thirty Years' War.

There are no restrictions. War has become total and unlimited, for not only are the bodies of men conscripted by law, but also their souls by propaganda.

Yet what is so appalling in total war—war without rules—is not the number of innocent lives sacrificed, nor the wanton destruction done; it is the popular gloating over these horrors.

"And what shall I ride in?" quoth Lucifer then—

"If I followed my taste indeed,

I should mount in a waggon of wounded men,

And smile to see them bleed."

This is the point at which Western Civilization has now arrived, a point never quite reached by Vandal, Goth or Hun. In sheer barbarity we can advance no farther, unless in the next World War the inhabitants of entire countries are exterminated.

War without rules and without laws of war is indeed an absurdity. Yes, Mr. Shaw, uncontradictably, you are right.

Evening Standard, 4th February, 1944.

ITALY AND GALLIPOLI

IN so many of our wars peninsulas have figured boldly. For instance, in 1808, we landed in Portugal and started on the Peninsular War; in 1854 we invaded the Crimea—a peninsula; in 1915 we landed on the Gallipoli peninsula and initiated the Dardanelles Campaign, and to-day we are fighting in Italy, yet another peninsula.

Tactically speaking, and more especially so when the terrain is narrow and mountainous, a peninsula favours the defensive, and is, therefore, not a good area for offensive operations. We discovered this in Gallipoli and to our cost, in Italy, we are now discovering it again.

In 1915 this was clearly appreciated by Sir William Robertson, then C.I.G.S. Later on, when writing of the Dardanelles Campaign in his *Soldiers and Statesmen*, he said: "This scheme had often been mentioned before the war and as often opposed by the General Staff. From a military standpoint it was not a practical proposition." This was but voicing the opinion of General Brialmont—the Belgian engineer—who, some twenty years earlier, when advising the Turkish Government, had stated that any attempt to occupy Constantinople by way of Gallipoli was doomed to failure.

As it will be remembered, the object of the Gallipoli invasion was to open the Dardanelles, occupy Constantinople and assist Russia. Strategically it was a bold scheme, but politically and tactically it was bungled: politically, in that endless proposals were made until the projected campaign became thoroughly muddled: tactically, in that all surprise was lost by a series of unnecessary preliminary bombardments.

The first came so early as 3rd November, 1914. The second, on 19th and 25th February, 1915, was followed by the landing of a small party of marines, who were so little interfered with that they leisurely blew up a number of Turkish guns. The third took place between 5th and 12th March, and thoroughly aroused the Turks. Nevertheless, the invasion of Cape Helles was delayed until 25th April, and though opposed by no more than two to three Turkish battalions, it proved a bloody affair. Fighting continued throughout the summer to end in a definite stalemate.

To break this, it was decided to effect a fresh landing at Suvla Bay, some twenty miles north of Cape Helles. The plan was well conceived, and on 6th August it was carried out by General Stopford under cover of a full-dress attack by the Helles forces against Sari Bair.

This new invasion came as a complete surprise, and the only troops the Turks had at hand to meet it were three battalions of gendarmerie and a few oddments, commanded by Major Willmer, a Bavarian officer. Nevertheless, lack of audacity and fear of sustaining casualties resulted in an immediate breakdown.

Instead of pushing inland, Stopford held back on the coast-line. Nothing much happened on the 6th and 7th, and when on the 8th Stopford was urged by Sir Ian Hamilton—C.-in-C.—to push on, he pleaded lack of artillery to cover his advance.

Of this day the German General Kannengiesser wrote: "... the goddess of victory held the door of success wide open for Stopford, but he would not enter ... nobody advanced. In short, a peaceful picture, almost like a Boy Scouts' field day."

On the 11th, "walking up the lower slope of Kiretch Tepe Sirt," writes Sir Ian Hamilton, "we found Stopford ... busy with part of a Field Company of Engineers supervising the building of some splinter-proof Headquarters huts for himself and Staff. He was absorbed in the work, and he said that it would be well to make a thorough good job of the dug-outs as we should probably be here for a very long time."

This spirit of "Safety First" wrecked Suvla Bay.

Already, I think, the reader will have noticed some startling resemblances between what happened in 1915 and what is now happening in 1944, and in spite of the origins of the two campaigns being very different.

As regards the second—our invasion of Italy—it arose out of our reopening of the Mediterranean, which, in my opinion, was accomplished, so far as was practicable, once Sicily was occupied. That island ours, we should have left Italy alone. On my part this is no afterthought, for on 31st August last—that is, three days before we crossed over to Reggio—I wrote:

"If our object is to open a tourists' office, then certainly let us go to Rome. If it is to run a honeymooners' hotel, then few better places can be found than Naples. But if it is to establish a Second Front, then our objective is Paris or nothing."

In 1918, Constantinople—whatever the difficulties—was a true military objective. In 1944, Rome remains still no more than an objective for archaeologists and sightseers.

Again, on 19th September—ten days after our main invasion of Italy—I wrote:

"As things are now turning out—and surely they might have been foreseen—it rather looks that ... we are faced either by a second Gallipoli campaign or else by a long-drawn-out advance up the whole length of the leg of Italy, which, being mountainous, is comparatively easy to defend and therefore difficult to attack."

I am not a clairvoyant; all I did, like Sir William Robertson, was to look at the map.

In spite of the fact that the forces which landed on 9th September moved a considerable distance up the peninsula, whereas those which landed at Cape Helles advanced only a few miles; in both cases and for similar reasons—good defensive country and a staunch foe—stalemate set in.

To liquidate this, it was decided to outflank the German defences on the Carigliano to the Adriatic by an operation identical to that of Suvla Bay.

This led to the landings at Anzio and Nettuno by troops of General Clark's Fifth Army at 2 a.m. on 22nd January, announced that evening in London, as "Beaches South of Tiber Stormed." Next day Reuter modified this by reporting: "... only small scattered detachments of Germans have been met so far" (as was the case at Suvla). Then the dispatch continued: "There was no opposition from shore batteries, and the American Forces landed without trouble of any kind." (As was also the case at Suvla with the bulk of the 11th Division.)

From all accounts this new invasion was admirably planned. Naturally it aroused great enthusiasm, as may be gleaned from the following head-lines of the succeeding three days: "German Defences in Chaos After Shock Beach Landing"; "Our Naval and Military Losses are 'Unbelievably Light'"; "Beach Armies Surging on—Towns Seized"; "Allies Astride Appian Way."

But, on the 26th, a change set in: "Stronger Resistance in Rome Bridge-heads," was the first warning. Others followed, then attack and counter-attack; the bridgehead shrank a little, to stabilize into what at present looks like a *Suvla sitzkrieg*.

Why was this, for no initial landing could have been more propitious?

Provisionally, I hazard in answer that the reasons are those of Suvla Bay; lack of audacity and fear of heavy casualties without overwhelming covering fire.

From the battle of El Alamein onwards, all our main engagements have been battles of *matériel* rather than of personnel or of generalship. When time and circumstances warrant the building up of fire-power in maximum, obviously it is the right thing to do. But, when they do not, to wait for it is frequently fatal. Success at Suvla was bunkered by "Safety First", and, so it would appear, "Safety First" has again bunkered us at Nettuno.

In part this is corroborated by Colin Bednall of the *Daily Mail*. In a dispatch, published on 27th January, he said: "More than 5,000 tons of bombs—about as much as the total tonnage unloaded on Berlin throughout 1943—was dropped on the Anzio area in one week before the Allied landing there."

If so, what for? Because, as the actual landings revealed, only "small scattered detachments" of Germans occupied that area. Could not this fact have been ascertained by spies before a bombardment on so vast a scale was decided upon? A bombardment which would enormously damage port facilities and the shore-line, and in consequence delay disembarkation.

Finally, though I do not suggest that, like the Suvla Bay landings, those at Anzio-Nettuno are going to end in a fiasco, I do suggest, from what has taken place, that had we, between 1918 and 1944, thoroughly digested the lessons of Gallipoli, our present campaign in Italy would be very different from the stalemate, permanent or temporary, which it appears to be. I also suggest that we would never have gone there, for peninsula climbing is not only a high art but also a very risky game.

17th February, 1944.

TOWARDS MILITARY SOCIALISM

As I am no more than a student of peace and war, I must leave it to the world-planners to don the mantle of Elijah, which significantly enough descended from the clouds. Nevertheless, when I examine their futuristic blue prints, it often occurs to me: have they even so much as a glimmer of the uncharted seas we shall be called upon to sail?

Though I doubt it, still it seems to me that, by scrutinizing the present, it

is possible to glimpse at least the shadowy outline of the future. And as one day we shall all be engulfed in it, so far as planning goes, its framework, in the making, is worth examining.

To begin with, where our planners go wrong is that they will emulate Procrustes. They lop or stretch humanity to fit the bed of a fixed idea. They call this idea "Democracy", overlooking the fact that war is the greatest of solvents, and that, when the present struggle has run its course, this bed itself will have been lopped or stretched. Much of it will have disappeared, and even should its four posts remain standing, the mattress we shall be called to lie upon is unlikely to be so soft as it was in 1939.

In illustration of this and with a change of metaphor, let us hark back to the French Revolutionary Wars.

In 1793 we set out to extirpate Jacobinism swaggering in a Phrygian cap. Yet, soon after that long conflict ended, we adopted that cult strutting under a Manchester topper.

War is indeed a remarkable solvent, for not only does it dissolve but it also precipitates. And this time what will the sediments be?

Will they be Democracy, or Communism, or National Socialism, or Fascism? I doubt it. Instead, will not they be a mixture of bits of all these cults compounded into something else? Otherwise put, will not this compound take after the present age and follow its evolving spirit? Therefore, what of this age?

It is "left wing" and bellicose, and though Socialism may or may not be democratic—e.g., ourselves *vis-à-vis* Russia—bellicosity, that is, militarism, is autocratic to the core.

Glance only at what has and is taking place under our very noses, here in democratic England, among ourselves—we who begot the Mother of Parliaments :

The whole nation is regimented, conscription embracing civil worker and soldier alike. Freedom of choice of occupation is gone, as much so as freedom to enlist into a particular regiment or service. The nation is in barracks, on aerodromes or in workshops—the trinity of total war.

Individual liberty has disappeared. Secret police have been established under evasive names. Magna Charta, the Bill of Rights and Habeas Corpus are 'virtually shelved'; for at the will of one man men and women can be arrested and detained without charge or trial.

The Mother of Parliaments has become sterile and unrepresentative. Food, clothing, petrol, housing materials, etc., are all controlled. The Press is under censorship and taxation is so high that Mr. Bernard Shaw has said : "We are . . . facing an irresistible drift of economic changes from absolute private property ('real' property) to public property, from Cobdenist private Capitalism to Fascist State-aided Capitalism. . . ."—What! What!

Not for a moment do I dispute that, in the eyes of our rulers, these changes in our democratic way of life are looked upon as anything other than war measures. Yet it cannot be contradicted that, taken together, they represent the bulwarks of the very system we are out to destroy. Further, that all are thriving in a "left wing" atmosphere—our idolization of Russia clearly points to this. Further still, the longer the war lasts, the stronger and the longer

will their roots grow, and that, as after the last war, when peace is re-established many will be too firm set to be eradicated.

On the top of this, demobilization will flood the country with millions of military-minded men; men who having done their bit will seek a bit done for them. Will they, once again, be content to sell bootlaces in the gutter? If not, what then?

In my unprophetic mind, these many things and others point to the out-crop of a new political framework—not a frame-up this time—which for want of a better name I will call “Military Socialism”.

Is this change peculiar to ourselves? Not at all, for it is part and parcel of a world-wide movement—a movement begotten by the machine and its driver. The first is a communist, for it has no object other than to work, the second is an autocrat—high finance—for his hand is on switch and throttle.

In our enemies' countries we watch an all but identical system, but its roots are yards longer than in our own. With our allies it is much the same, yet with at least one marked difference. Whereas in the U.S.A. freedom of the individual still commands attention, in Russia it disappeared with the coming of Lenin. In that vast aggregation of countries—the U.S.S.R.—the purely socialistic phase has been traversed, and many tendencies to-day point to the militaristic phase becoming dominant.

Listen to a writer in the *Economist*: “. . . during the greater part of the war, most of the startling changes in ideas and attitudes have taken place in the Army: it is the Army that has seemed to take the initiative in almost every change, reform or counter-reform.” Also he points out that the symbols and customs of the Imperial Army have been readopted; political commissars have disappeared, the Guards have been re-established, also the orders of Kutuzov and Suvarov, epaulettes and officers' clubs. Further still, “A martial hierarchy had been introduced in many fields of civilian life; even railway staffs have been given the titles of majors, colonels and generals.”

From the *sans culotte* stage Russia is passing into the Napoleonic, and in that country, so it seems to me, the Communist State is rapidly being transformed into a militaristic one no more than cemented together by Socialism.

Let us now turn from these changes in the political lives of friends and foes to the war itself. What do we find? That the very means whereby it is waged, both economic and military, must hasten the process of world revolution.

In the occupied countries new economic and financial systems have been forced upon their peoples; systems which, as the war drags on, are taking root and are challenging the old. Many there must be who, by accommodating themselves to them, have already established vested interests in them. Many there are who have not. Hence these countries are internally divided, and as “peace” approaches civil war looms over their horizons, and of all conflicts civil wars are the most devastating, autocratic and total.

Finally, I come to Germany and Japan, and as the means of subduing them are likely to be similar, I will solely consider the first.

Thus a Belgian collaborationist—Raymond de Becker—has written:

“Think for a moment what the destruction of Hamburg, Cologne, Dortmund, Essen, Milan, Genoa, and so many other European cities means. Think of the hundreds of thousands of men to-day without a roof, without a home, who live in barracks or with strangers, and eat in canteens, add to these

the millions of workers dragged from their house and country, and you get an idea of the nihilistic revolution that is being hatched."

What does this mean? That every air attack adds to the proletarianization of Germany, as between 1914-1917 different means produced a similar result in Russia, a result clinched by the dictatorship of the proletariat, which started as a most unpleasant affair.

With these facts before me, as a student of war my conclusion is : that one and all—friends, foes and neutrals—are being pushed by circumstances and events along a new political path.

Oswald Spengler, in 1917, predicted this in his book *The Decline of the West*, and to me it seems that his prediction is coming true. He called it "Cæsarism"; Professor Toynbee calls it "Time of Decline", and I call it "Military Socialism"—there is little in a name.

Even should the above facts be doubted, they are sufficiently startling to warrant our many planners examining them. For unless they are willing to withdraw their heads from the clouds, and plant one foot firmly on history and the other as firmly on history in the making, it is highly probable that, when "our boys come home", they will find the feather beds now being stuffed for them are but bags of broken flint. What then?—Tally-ho! Tally-ho!

Evening Standard, 18th February, 1944.

II

BOMBING AND ITS ISSUES

As the last war was overwhelmingly a gun war, the present is predominantly a bomb war, and the factor which differentiates them is that the projectile thrower has been translated from earth to air. This positional change has enabled the attacker to ignore navies and armies, and strike directly at their bases of supply—the industries which sustain them in the field or on the water.

But the revolution does not halt here; for, when carried to its logical conclusion, it reads : As both fighting and industrial power depend on the will of the people to carry on the war; therefore the civil will is the primary object of attack, for once it is broken everything collapses.

Such is Douhet's theory of war, as elaborated in his book *The Command of the Air*. In it we read :

"For example, take the centre of a large city and imagine what would happen among the civilian population during a single attack by a single bombing unit. . . . What could happen to a single city in a single day could also happen to ten, twenty, fifty cities. . . . A complete breakdown of the social structure cannot but take place in a country subjected to this kind of merciless pounding from the air. The time would soon come when, to put an end to horror and suffering, the people themselves, driven by the instinct of self-preservation, would rise up and demand an end to the war—this before their army and navy had time to mobilize at all!"

Douhet was a fanatic, and like most fanatics he had a one-railed mind. His solution was so simple that he pictured France clamouring for peace within 36 hours of the first belligerent attack. Yet the problem he set to

thinking men bristles with as many problems as does a porcupine with quills. And amongst these the foremost is neither military, economic nor moral; it is political, and wrapped round not only the object of a particular war, but of all wars other than pure plundering expeditions.

The first question he should have asked himself is this: What is the purpose of war? Is it to destroy or defeat the enemy? No, destruction and defeat are means and not ends. Instead, it is to establish a peace which is reasonably profitable to the victor. And unless such a peace is established the war will have been fought in vain.

This, in my opinion, is uncontradictable. Therefore, let us pass on to the present struggle and examine it in this light.

The first thing to settle on is obviously our peace aim. And not until this is done can we decide on the most economical means of gaining it.

Here we strike a snag, because the Allied Governments have not as yet clearly defined what their object is. The pronouncements hitherto made are of the vaguest. Yet, taken together, it may be assumed, so far as the Anglo-American aim is concerned, it is to establish a war-free, contented and prosperous democratic world.

Once this is agreed upon, the next question is—how can the enemy's resistance be broken?

The means are three, and they can be applied separately, or in combination; they are:

- (1) The defeat of his fighting forces.
- (2) The destruction of his industrial power.
- (3) The demoralization of his civil will.

In spite of Douhet's 36 hours' nightmare, the war has proved beyond question that, so far as the present development of air power stands and is likely to stand even should the war last ten years, it alone cannot win. In respect to this, be it noted that, whereas in 1940 a combined air and mechanized land attack caused the collapse of France in 36 days, two years of intensive bombing of German cities has thus far not broken German morale. On the contrary there are signs that it has actually strengthened it.

Let us suppose, however, that Douhet's main error was not in fact but in timing—that is, the time it takes mass air attacks to prove fully effective. Then the tactics we should adopt are clear: Whilst our land forces hold the German land forces, grinding them down in battles of attrition, our bomber forces, little by little, should devastate Germany economically and morally, until such a tension is reached that at length hostile military resistance snaps.

Though, obviously, this means winning the war militarily, it does not follow that a political victory will result—that is, that a set of conditions will be established which will make the gaining of our peace aim possible.

Why? For this simple reason, paradox though it may at first seem: the most favourable conditions for eventual peace are those which demand the least destruction of the enemy's civil assets; for the more they are destroyed the more difficult does it become to found a peace.

The maximum destruction means the annihilation of German industry, without which not only will Central Europe collapse into economic chaos, but the reinstatement of our foreign trade with Europe will for years be impossible. It also means, on account of the destruction of housing and private property,

the proletarianization of masses of the German people, and, in consequence, the creation of a hotbed for revolution, civil war and dictatorship.

Should I be right in this—and I am not the only critic of our present bombing policy who thinks on these lines—do I then suggest that bombing of the enemy's civil and industrial targets should cease?

As regards civil targets—yes; for I do not believe that frightfulness pays in war. Further, that its repercussions are generally long-lived and disastrous, e.g., Cromwell's massacres in Ireland.

As regards industrial targets, I suggest that it is more profitable to keep *the sources of the enemy's military and industrial energy* under constant aerial bombardment, than to bomb his scattered industries.

These sources are his coalfields, the Rumanian oil wells and his synthetic oil plants. The first two are immovable, they cannot, like munition works, be shifted from place to place. Because this is so, they enable the principle of concentration of force to be applied.

A moment's thought will show what the result of such concentrated bombing of *fixed* targets is likely to be.

Here, in England, we are told that the present condition of our coal industry is "the greatest crisis of the war", because "coal is now the most urgently needed war material". This, in spite of the fact that our coalfields are, to all intents and purposes, working under peace conditions.

Instead, let us suppose that 200,000 tons of bombs—approximately the tonnage we have unloaded on German cities and industrial areas—had, during the last two years, been rained on them, what form would the crisis now take? As it is already the greatest of our supply problems, well may it be asked, would there still be a crisis at all? Months back, would not we, industrially, have collapsed?

If this is true for us, a non-blockaded country, how much truer it is for Germany. Had we unloaded the 200,000 tons of bombs, or even half that weight, on German coal-fields, Rumanian oil wells and German synthetic oil plants, would we not have done far greater damage to the German war machine than by attempting, as we have, to blow the top off and the bottom out of her peace potentials—her industrial areas and her cities?

To me our bombing policy appears to be suicidal. Not because it does not do vast damage to our enemy—it does; but because, simultaneously, it does vast damage to our peace aim, unless that aim is mutual economic and social annihilation.

24th February, 1944.

12

THE TOLL OF WAR

WAR is an invisible as well as a visible reaper, for its scythe sweeps through the nations as well as over the battlefields. Everywhere it brings death; directly by killing, indirectly by reducing populations through social upheavals.

It is as well that civilians should know this, for they are the more numerous of its victims.

It has been calculated that in the First World War, out of the total deaths caused by it—namely, 41,435,000, no less than 28,379,000 must be debited to civilians. As one writer has pointed out: "A population exceeding that of France or Italy was wiped out. In Europe itself the war carried off a population of about 25 millions, exceeding that of Sweden, Norway, Denmark, Holland and Switzerland combined."

To-day we often hear it voiced that bombing economizes the lives of our fighting men. Though this may or may not be true, as this article will show, it is the length of a war and not the method of fighting which is the great destroyer of life, not only among the vanquished and the victors, but also among neutral nations.

Let us glance at the last category. It is an astonishing fact that each war of the last and present centuries has detrimentally affected neutral populations, and the nearer a neutral nation is to the seat of war the more is this apparent. Here are a few figures:

The highest number of deaths recorded in Holland occurred in 1859, 1866, 1871 and 1918; in Switzerland in 1870, 1871 and 1918; in Belgium in 1866 and 1871 (also 1918), and in Sweden, Norway and Spain the maximum number of deaths ever observed was registered in 1918. Be it noted that all these dates are war years, and that the wars of 1859 and 1866 were local and brief.

It is also astonishing to learn that the surplus deaths caused by the First World War in Norway, Sweden, Denmark, Holland, Switzerland and Spain—all neutral countries—has been computed at a fraction under 600,000—and be it remembered not a shot was fired in these countries.

The reason for this is twofold: first, the abnormal conditions created by war, and secondly, the epidemics which arise during and after a war. The severity of both these causes is to be measured by the length of the war and not by the intensity of the fighting.

I will take abnormal conditions first. They are due to the social and economic upheaval inseparable from war. This is witnessed in all wars since statistics have been kept. Thus, to take the death, birth and marriage rates per each 1,000 of the inhabitants in the belligerent countries during the 1866 and 1870-71 wars, the figures are as follows:

The 1866 War: Deaths in Austria and Prussia respectively were 30.3 and 26.9 in 1865, and 40.8 and 34.1 in 1866. Births, 37.8 and 39.3 in 1865, and 36.8 and 37.1 in 1867. Marriages, 16.1 and 17.7 in 1865, and 13.0 and 15.6 in 1866.

The 1870-71 War: Deaths in France and Germany respectively were 23.8 and 27.2 in 1869, and 35.1 and 29.6 in 1871. Births, 25.4 and 38.2 in 1869, and 22.9 and 34.5 in 1871. Marriages, 16.1 and 18.4 in 1869, and 12.1 and 15.4 in 1870.

In the First World War it is the same: but, on account of its length, generally the percentages are more marked:

Deaths in France, Germany, England and Italy in 1913 respectively were 17.6, 15.7, 13.6 and 18.3, and in 1918—22.0, 18.9, 17.6 and 33.0. Births in 1913—18.4, 27.2, 24.0 and 31.1, and in 1918—12.2, 14.3, 17.7, and 19.1. Marriages in 1913—15.4, 15.6, 15.7 and 14.7, and in 1918—10.9, 10.9, 15.3 and 6.0.

In France, the loss in population was a veritable catastrophe. In numbers the country was thrown back 60 years. In 1921 the census stood at 37,660,000, whereas in 1866 it was 38,080,000. Undoubtedly this was one of the main reasons for the collapse of France in 1940—fear of biological extinction.

The second cause was epidemics. At one time they ravaged all belligerents no sooner than war was declared. But during the last and present centuries, on account of the progress in medical science, these ravages have steadily been limited. Nevertheless, in a long war the sanitary front progressively weakens.

The following figures are interesting. In the 1866 Seven Weeks' War the number of combatants killed, wounded and missing was 53,000, yet the cholera epidemic which followed that war carried off 200,000. In 1871 it was the same; whereas the Germans lost 41,000 killed and died of wounds and the French about 100,000, the smallpox epidemic which followed the war accounted for 270,000 Germans and about 800,000 Frenchmen.

Though in the First World War the sanitary front in Russia and Serbia rapidly caved in, and thousands died of cholera, typhus, dysentery, etc., it was not until 1918-1919 that the devastating influenza epidemic swept the world. Though the number of its victims can only be conjectured, it is believed that this scourge carried off no less than 15,000,000 people: in Europe, 2,500,000; in the U.S.A., 1,500,000; in Asia, 10,000,000, and in Africa, S. America and Australia at least 1,000,000.

During this war and mainly due to blockade, poor rationing and overstrain in factories, one of the greatest scourges in Western Europe was tuberculosis. In France it increased by 10 per cent; in Denmark and England by 25 per cent; in Spain by 33 per cent; in Italy by 44 per cent; in Germany by 61 per cent, and in Austria by 67 per cent. In Germany the excess of deaths from this disease over pre-war figures was 160,000, of whom 140,000 were civilians.

Yet, in spite of these devastating losses, the most revolutionary change the First World War brought about was the excess of women over men. Thus, to take France and Germany as outstanding examples, among males the percentages of losses were as follows:

Between the ages of 20 and 24, in France 14.4 and in Germany 20.8; between 25 and 29—20.7 and 25.6, and between 30 and 39—16.1 and 15.3 respectively.

This caused a marked disparity between men and women. Thus, the number of men to every 100 women was:

Between the ages of 20 and 24, in France (1921) 85.6 and in Germany (1919) 79.2; between 25 and 29—79.3 and 74.4, and between 30 and 39—83.9 and 84.7 respectively.

This meant that for one-fifth of the women of France and one quarter of the women of Germany between the ages of 25 and 29 there was no man.

The effect of this disparity on social morality was catastrophic. It literally upheaved society and led to all manner of psychological and political reactions.

Taking all these facts and figures together, what we see is that in war it is not so much the battles which shape the future; instead it is the length of the war.

In peace or war, population is the fundamental problem. Between the

years 1800 and 1900 the population of Europe more than doubled. Nevertheless, in the last quarter of that century a decline set in, which was largely due to restrictions of the birth rate, among which war has proved itself to be not the least powerful of "contraceptives".

Not only does war deplete the existing generation, but also future generations. Whereas, according to the 1911 census in France, children aged from two to four numbered 52 per 1,000 inhabitants, the 1921 census shows that children born in 1916-1918—that is, of the same age—numbered but 27 per thousand. The same holds good for other belligerent nations.

Should this decline continue, then, as happened in the Roman Empire, Western Europe will become biologically conscious of approaching extinction, and with this consciousness her gates will be opened to the virile and teeming myriads of Asia, as were those of France to the Germans in 1940. Such is the fundamental problem the war will bequeath to us. It has happened before, it may happen again.

28th February, 1944.

13

THE NEXT WAR

ONE of the differences between peace and war, and possibly the most marked of all is that, whereas the conflicts of the former are waged by words, those of the latter are fought with weapons: an argument is a word battle, and a battle is a weapon argument. When a baby yells, it is using sound as a weapon, also a dog when it growls, a lion when it roars and a soap-box orator when he orates. Further, in actual fighting, sound is the most primitive of all weapons, a weapon which long must have preceded the club, stone axe and flint-tipped spear, and strange to say, in spite of man's inventiveness, it has remained a weapon.

For instance, in the Indian wars the Redskins opened their attacks with blood-curdling war-whoops and yells in order to strike terror into the hearts of their enemy—later on the Confederate soldier did the same. A classical case is the terrific yell of "Remember the Alamo!" shouted by Sam Houston's men at the battle of San Jacinto in 1836, of which Captain Calder, an eye-witness, wrote: "I am by no means certain that our shot was more effective in creating confusion and panic in the ranks of the enemy than this tremendous yell, preceded, as it had been, by almost perfect silence." Therefore, sound as a weapon is not mere noise, instead it is noise artistically fitted to circumstances.

A perfect example of this is to be found during the early period of the Civil War in West Virginia. Then the Confederate General Wise ordered a young artillery lieutenant to open fire. A dense forest prevented that officer from seeing the enemy, and pointing this out to General Wise, he added that, if he opened fire, he would "do no execution". The incessant crackling of rifles and whistling of bullets emphasized the wisdom of the General's reply, which was: "Damn the execution, sir, it's the noise we want." Noise to frighten the Federals and to re-moralize his own men.

Bearing in mind these few examples, to which innumerable others could with ease be added, it is indeed strange that, so far as I am aware, no treatise has ever been written on sound as a weapon, and doubly strange is it when we remember the stupendous advances made in electro-acoustics during the last twenty years. I will, therefore, examine this question, for surely it is one which discloses unlimited possibilities.

To begin with, of all effects emanating from outside ourselves and which impinge upon our senses, sound is the least escapable. We can close our eyes naturally, but our ears we can only stop artificially, and though the same applies to our noses, odours are less frequent and noticeable than sounds.

Now, if a musical note—and this is a fact—can crack a glass tumbler, and a mother can sing her baby asleep with a lullaby, and a man can enrage or terrify another by a word shouted in anger, it should be possible, since electro-acoustics can reproduce every type of sound, to turn sound into a formidable weapon. And not merely the sounds which we can hear, but possibly also some of the so-called “ultra-asonics”, which lie beyond the audible range of our ears. Fortunately, perhaps, God or Nature, realizing the wickedness of man, has so arranged it that the bulk of these inaudible sound waves are unable to travel very far in the air. Could they do so, they might readily be converted into formidable weapons, because, so I am told, “experiments have shown that small animals can easily be killed with the help of ultra-asonic waves.”

Setting them aside, we are left with sound waves of audible range, and as it is well known that the sound of one single frequency is extremely disagreeable to our sense of hearing, and that its unpleasantness increases with increase in frequency, so much so that it is possible to cause a human being to fall into a faint, surely here is opened up to the soldier a vast field of experimentation. Therefore, in the next war, if not in this one, we may see sound as a weapon take upon itself two forms :

(1) Noises which produce psychological effects on the nervous system, such as—frightening, surprising, enchanting or encouraging the listener, as the old drummer did when he beat the “charge”, or as the opening of the artillery barrage does to-day.

(2) Noises which produce a physiological effect on that same system, such as fainting, mental confusion, sleeplessness or somnambulism, as a mother sings her child to sleep or a barking dog keeps it awake.

Though I am neither a scientist nor a musician, seeing that we are in possession of electrical instruments which can produce any desired mixture of sound of all frequencies, instruments which can be played on a keyboard, like a piano or an organ, I do not find it at all ridiculous to suppose that a day may dawn when nations at loggerheads will, instead of blowing each other to pieces, attempt to conquer one another by means of divine or diabolic music.

Then the cannon and the tank will disappear, also the aeroplane, the rifle and the machine-gun, and in their place, bands armed with musical instruments, instead of lethal weapons, will engage one another on the battlefields, and great oratorios will be played as well as sonatas, symphonies, solos, duets, concertos, and jazzy interludes larded with cat-calls. Then victory will depend on *allegro*, *allegretto*, *adagio*, *rondo*, *minuetto* and *scherzo*. Sentries will be crooned to sleep, whole armies will be set bottom-wagging, generals will be thrown into trances and their staffs rendered dotty. Armour will disappear

and be replaced by wax. Finally, wars will be won by trombones, bassoons, fifes, flageolets, sax-horns, drums, cornets, penny whistles, ukuleles and Jews' harps, and not as in this present barbaric age by bullets, shells, bombs, grenades, torpedoes and bayonets.

Why not? We have five senses—namely, feeling, sight, hearing, smell and taste. So far, nearly all warfare has been concentrated on the first, its object being to hurt. Surely, to-day, hurting, in the form of wounding and killing, has gone far enough. Why not, then, a little music, and when that fails, a blinding light, a suffocating stench or such a nauseating flavour that all the soldier can do is to vomit? Indeed, why not?—war could have no more appropriate an end.

10th March, 1944.

14

THE DECISIVE FACTOR

THOUGH nothing in war is certain, we have, so I think, every justification in assuming that 1944, like 1918, will be the year of decision—that is, a year of climax, collapse or of victory. Therefore, it is more than of passing interest to ask ourselves this question: "What is the decisive factor in war?"

Some two thousand one hundred years ago, the Greek historian Polybius answered this question once and for ever. "Of all the forces," he wrote, "which are of influence in war, the spirit of the warrior is the most decisive one."

It is the most decisive because, without the will to fight, it matters not how great a nation is, how rich and powerful, how well armed, well led and well equipped, none of these things is quickened. As Marshal Saxe once said: "The human heart is the starting-point in all matters pertaining to war." And he might have added: "Not only the starting-point, but also the pivot upon which everything turns."

"Walled towns, stored arsenals and armouries, goodly races of horse, chariots of war, elephants, ordnance, artillery, and the like," wrote Bacon, in his essay *Of the True Greatness of Kingdoms and Estates*, "all this is but a sheep in a lion's skin, except the breed and disposition of the people be stout and warlike. Nay, number itself in armies importeth not much, when the people are of weak courage; for, as Virgil saith, 'It never troubles a wolf how many the sheep be.'"

Though this is true, notwithstanding, walled towns, stored armouries, ordnance and the like are not to be despised, for the spirit is not a lethal weapon, nor can the soldier shield himself by means of it. In fact, the more perfect the material things in war are, the more is the spirit of the warrior secured, and the more it is so, the more decisive it grows.

Let us now look a little more closely at this. Though the source of the spirit of the warrior is the warlike disposition of a people—their innate courage—it is fed on superior leadership, superior skill at arms, superior supplies, and last but not least on superior weapon power. On this point General von der Goltz in his well-known book *The Nation in Arms* long ago said:

"Nothing is worse than that the soldier feels himself neglected in this respect, and to believe himself subject, without his own fault, to an effect to which he is powerless. Defeat would thus appear excusable, and success cannot have a worse enemy than this feeling."

I imagine that this was not the least of the causes which brought the French armies to ruin in 1940. They were out-gunned, out-tanked and out-planned, and they knew it, therefore they were out-spirited.

Besides weapons to fight with, the will of the soldier is sustained by the will of the nation to which he belongs, and never more so than to-day, because in total war there is no definable separation between them. In fact it may be said that what is generally called "the civil will" is the substance of the military will, which is no more than its shadow. If the civil will is staunch, so also is the will of the soldier; should it waver, then his will wavers, and should it collapse, the whole defensive edifice comes tumbling down.

To undermine this spirit we have three means—the physical, economic and psychological attacks. The first is achieved by battle, the second by blockade and the third by propaganda. When possible all three should operate simultaneously and co-operate intimately.

Obviously, the unexpected, irresistible physical attack should always be our aim. Nevertheless, the conditions it demands become less and less favourable as a war lengthens out, because surprise gives way to exhaustion as the governing factor.

It is when this stage sets in, as I believe it now has in the war, that the attack on the enemy's will—the warlike disposition of his people—becomes of paramount importance. Not in the form of a propaganda of retribution or of vengeance, but instead in what may best be called "the propaganda of the alternative".

Two examples drawn from the last war will make this clear. The first is the rotting of the French Army in 1917 by subversive propaganda carried on by the *Bonnet Rouge*, edited by a man called Almeréyda, who was in German pay. It gained such influence that, on 31st May, that year, President Poincaré put the following question categorically to General Pétain:

"If there is an international Socialist congress at Stockholm, and if the French meet the Germans to discuss terms of peace, can you keep the army in hand? Will you be in a position to make it go on fighting?"

Pétain's answer was an immediate "No!"

Back-area propaganda had so rotted the will to win of the French Army that it only needed French and German Socialists to meet in congress for that army to lay down its arms.

The second example is the sapping of German morale by President Wilson's New World Order, based on his twenty-three "Terms of Peace", issued early in 1918.

Though at first they had little influence on German policy, directly conditions were propitious—that is, directly the great German offensive of the spring and summer had failed and the great Allied offensive had opened—they began to work like a subtle drug. After all they did offer an alternative to irretrievable defeat.

Thus it came about that, on 6th October, the Imperial Chancellor, Prince Max von Baden, telegraphed President Wilson that the German Government

was willing to accept the twenty-three "Terms of Peace" as a basis of peace negotiations.

On the 23rd Wilson replied that he could not consider peace negotiations, but solely surrender. Thereupon, on the 27th, the German Government asked for an armistice.

What would have happened had such an alternative not existed it is impossible to say. The probabilities are that the war would have been prolonged, but in what form? Would it have been a series of great battles ending in a triumphal march through Berlin? Or would it have been a stalemate leading to negotiations or a general collapse?

Though no man can answer such questions, it should not be overlooked that by the autumn of 1918 all belligerents, except the Americans, were exhausted and thoroughly weary of the war.

Mr. R. H. Mottram notes this in his *Three Personal Records*. He says that as the war approached its climax "a new spirit of taking care of one's self" developed among the men, "which ended in late 1918 in few rifles being fired, and would, in a few more weeks, have meant the cessation of the War, by the front line not refusing but quietly omitting to do duty. The Armistice came just in time."

Should this be accepted, then it will be appreciated how vastly important the psychological attack is once a war of exhaustion has set in. If skilfully used, propaganda is in fact the straw which breaks the camel's back. "It is," as Colonel Norman G. Thwaites once said, "as important as ammunition. But," he added, "propaganda may win without artillery. Artillery without propaganda is futile."

To-day these words are worth pondering.

Evening Standard, 18th March, 1944.

15

AIRCRAFT IN BATTLE

THE British Secretary of State for War recently said that "One feature of the Russian fighting was the enormous German air inferiority", an inferiority due, as the Secretary of State for Air all but simultaneously explained, to the tying down of four-fifths of the German fighter strength in the West, in order to protect industrial and other areas.

Accepting this as correct, the fact remains that, in spite of this enormous air inferiority, for over a year now the Germans have carried out a methodical retreat from the Volga to the Narva and the Ukrainian Bug.

Much the same happened in North Africa, where from the battle of El Alamein onwards to the final collapse outside Tunis, German air inferiority was complete. Therefore, it may be asked, is air power at a discount in retreats? On the face of it this question is absurd, because it is as clear as daylight that, once command of the air is gained, the ability of aircraft to follow up a retreating army is child's play.

Besides retreats there have also been, both in Russia and North Africa, advances and battles made and won by armies inferior in air power. The

most spectacular was General Rommel's summer of 1942 offensive. In spite of his enormous inferiority in aircraft, he defeated the British at Gazala, stormed Tobruk and advanced to within sixty miles of Alexandria!

Well may it be asked: Is, then, air superiority vital to success? The surest way of answering this question is to examine the tactical use of aircraft.

There are two air theories—the Anglo-American and the Russo-German.

In brief, the first may be set down as follows: Never launch a major land attack until air supremacy is won. And do not attempt to gain this supremacy until a numerical superiority in machines is established.

The leading exponent of this theory is General Montgomery. Mr. Churchill has called him "a Cromwellian figure". I prefer to call him a Ulysses S. Grantian. Anyhow, this is what an observant war correspondent has said of his tactics: "By the Montgomery method the whole art of war is reducible to a pattern and a series of numbers; it is all based on units of man-power and fire-power and so forth." In short, on weight of metal.

This theory is, in fact, all but identical to the one held in the last war, which hinged on the principle—"artillery conquers, infantry occupies." Yet, with this distinction: the aeroplane, in the form of flying artillery, as much so as the gun, is considered essential in preparing the battle. Therefore the sole major difference between 1917 and 1944 is that cannon can now fly.

We saw this at El Alamein, a battle prepared by bombing and bombardment. We saw it in the storming of the Mareth Line, in Tunisia, in Sicily, at Salerno, and lastly at Nettuno. There, in order to render invasion less costly, 5,000 tons of bombs were unloaded prior to landing. These vast preparatory bombardments are patent to every Anglo-American attack.

Now let us turn to the Russo-German theory. What do we find? First, whereas the victors of 1914-18 never abandoned the old doctrine of battle, the vanquished did, for adversity had taught them much. They saw in the aeroplane a co-operative rather than a preparatory weapon. Though, when time and means allowed, they did not despise the Montgomery method, they never became slaves to it, because they realized that *velocity of attack is more important than methodical preparation*.

In short, they are war-minded rather than air-minded. That is, they fit air power into the scheme of war and do not let it dominate it. Why? Because of its intrinsic limitations—lack of accuracy in aim and lack of volume of fire. To hit a small target on the battlefield with a bomb is a fluke, and on the battlefield there are few large targets. To unload on an enemy in position 5,000 tons of bombs a day for a month on end is not as yet a practical proposition. Nevertheless, in 1916, during the battle of the Somme, 148,000 tons of shells were fired in 30 days into a comparatively small area, and the year following, at Ypres, 107,000 tons in 13 days.

It is because of these limitations that the Russo-German theory varies from the Anglo-American. Also there is another and deeper reason. Whereas the Russians and Germans are professional soldiers, the Americans and British are amateurs. Not less brave, but less war-saturated. Not so much in this war as throughout the whole course of their respective histories. As professionals, the first two believe with Clausewitz—"Let us not hear of Generals who conquer without bloodshed." As amateurs, the second two believe in "Safety First". They seek to avoid high casualties; therefore it so often

happens that they cramp not only the *elan* of their men, but also the impulse of their own imagination.

In facing risks, the Montgomery school has not yet caught up with Ulysses S. Grant. And, when it does, I suggest that its adherents then set out to catch up with that past-master of accepting risks—Robert E. Lee.

27th March, 1944.

16

HOW THE NAPOLEONIC WARS ENDED

ONE day the war will end. Will it end like the last war, to be followed by twenty years of fraudulent peace, or like the Napoleonic, by a true peace of forty, or of a hundred years, if the inane war in the Crimea be omitted? That depends not only on how it ends, but on what we do when it does. Therefore it is of some interest to refresh our memories on what happened in 1815.

Crushed at Waterloo on 18th June, Napoleon got into his coach and made for Paris. He was still hopeful, for the next day from Philippeville he wrote to his brother Joseph saying that he would speedily raise 300,000 men to defend France. At four a.m. on the 21st he alighted at the Elysée, and at once sent for Caulincourt, Duke of Vicenza, to ascertain from him the political situation.

"Well, Caulincourt," he said, "here is a pretty to-do! A battle lost. How will the country bear the reverse? Will the Chambers back me up? . . . It is a frightful disaster . . . the enemy was beaten at every point, only the English centre held . . . Ney acted like a madman . . . , etc."

Next he went to his bath and a little later he summoned an assembly of the Chambers.

That evening Carnot went to the Peers, and Lucien, Napoleon's younger brother, to the Deputies. Though they strongly supported the Emperor and demanded that he be proclaimed temporary dictator, Lafayette, leader of the popular party, carried the day. Accused by Lucien of ingratitude, Lafayette sprang to his feet and exclaimed:

"During more than ten years, 3,000,000 of Frenchmen have perished for a man who wishes still to struggle against all Europe. We have done enough for him. Our duty is to save the country."

The upshot was that at noon on the 22nd Napoleon abdicated. Whereupon the Government was invested in a Commission of five, with Fouché, Minister of Police, as President. A few days later the Emperor retired to Malmaison.

The first action of the Provisional Government was to ask for an armistice. This was at once refused by Wellington, whereas Blücher was willing to consider it were Napoleon surrendered to him "dead or alive". Remonstrating at this suggestion, Wellington received the following reply from Gneisenau, Blücher's Chief of Staff, "that the Prussians would see to it that Napoleon was handed over to them for execution". Thereupon, to effect this, Blücher dispatched a flying column to Malmaison to kidnap Napoleon on the night of the 30th.

The Prussians were, however, to be disappointed, for Fouché—who had

a foot in both camps—hearing of this on the 29th, sent a message to Napoleon urging him to make for Rochefort and await there a British passport to proceed to the United States. At 6 p.m. the next day he set out, and so escaped the Prussians by a few hours.

Meanwhile the Allied Armies advanced on Paris, the English maintaining strict discipline, whilst the Prussian pillaged and plundered as it advanced.

On 3rd July Fouché—all along intriguing with the Bourbons—persuaded the Provisional Government to agree to the restoration of Louis XVIII. Thereupon Articles of Capitulation were drawn up and signed by Louis, the 12th Article reading :

“ . . . all the individuals who are at present in the capital shall continue to enjoy their rights and liberties, without being disquieted or prosecuted in any respect, in regard to the functions which they occupy, or may have occupied, or to their political conduct or opinions.”

On the 7th the Allied Armies entered Paris. Then came Louis XVIII on the 8th with the British baggage train. The streets were all but empty and not a sound was to be heard save the clatter of the horses' hoofs. Whilst Wellington's men encamped in regular order in the Bois de Boulogne, Blücher's bivouacked “in the churches, on the quays and in the principal streets”.

Meanwhile, Napoleon took the Rochefort road, and, arriving at his destination on the 8th, he boarded the frigate *Saale*. The next day he sent a letter to Captain Maitland, commanding H.M.S. *Bellerophon*, then cruising off the island of Oléron, asking whether his passports had been made out and whether he could sail for America. Receiving in reply a very definite “no”, on the 15th he surrendered to Maitland, who soon after stood out for Plymouth. During the voyage the Emperor so ingratiated himself with the crew that before reaching England one of the sailors was overheard to say : “Well, they may abuse that man as much as they like, but if the people of England knew him as well as we do, they would not hurt a hair of his head.”

At Plymouth he became an object of intense curiosity, shoals of boats struggling and jostling round the *Bellerophon*. And, we are told, each time he appeared on deck the women waved their handkerchiefs in great excitement.

There he learnt from Lord Keith, admiral commanding the station, that the Government had decided to send him to St. Helena. He protested vigorously ; but when Keith remarked that to go to St. Helena was better than being handed over to Louis XVIII or to Russia, he exclaimed, “Russia! God keep me from that.”

On 7th August, he and his suite were transhipped to the *Northumberland*, commanded by Admiral Sir George Cockburn. His voyage to St. Helena must at least have been a convivial if a tragic one, for the Admiralty official records inform us that the consumption of wine at the Admiral's table by his seven guests and six British officers was 20 dozen of port ; 45 of claret ; 22 of madeira ; 13 of champagne ; 7 of sherry and 5 of malmsey—that is, 112 dozen in all!

Whilst these dozens were being emptied on the high seas, things were moving in Paris. There Blücher was shouting for vengeance, and as Napoleon had escaped him he insisted that the Austerlitz Column should be pulled down, and actually set about mining the bridge of Jena, when Wellington, by placing a picket on it, prevented that piece of vandalism.

Next, the problem of "war criminals" arose. Popular opinion demanded "that France should be made to feel what she had inflicted on others", so writes Alison in his *History of Europe*. Then he continues: "A very long list of proscriptions was at first rendered by the European powers; and it was with the utmost difficulty that they were reduced, by the efforts of Talleyrand, supported by Lord Castlereagh and the Duke of Wellington, to fifty-eight, of persons to be banished."

Banishment was, however, not enough. Blood was demanded. So finally it was agreed to shoot Marshal Ney, Colonel Labédoyère and Count Lavalette. All three had betrayed Louis XVIII during the Hundred Days. Labédoyère was executed, but Lavalette was saved by the heroism of his wife. Visiting him in prison, she exchanged clothes with him and thus enabled him to escape.

Ney was brought before a court martial, but as it was impossible to find a president to sit on it, for each Marshal of France approached refused to preside, he was eventually tried by the Chamber of Peers.

The trial was a long one, and in the middle of the proceedings he sought shelter under Article 12 of the Capitulations, for he was in Paris when they were signed. This plea was not accepted, and so, on 6th December, he was shot in the gardens of the Luxembourg. Thus died the bravest soldier in France, and the spot where he fell has ever since been venerated.

Lastly, the question of indemnities was raised. Austria wanted Lorraine and Alsace; Spain, the French Basque provinces; Prussia, Mayenne, Luxembourg and all the provinces of France adjoining her territory; and Holland claimed the whole of the French fortresses of the Flemish barrier.

Wellington strenuously opposed this partition, and, supported by Castlereagh, he won the day. He saw that were it allowed two things would happen:

(1) France would never forgive dismemberment, and so another war would become inevitable.

(2) Louis XVIII and his rickety Government would be overthrown by revolution.

He had an inborn horror of popular risings. Whilst agreeing that France would be left "in too great strength for the rest of Europe", he pointed out that "revolutionary France is more likely to distress the world, than France, however strong in her frontier, under a regular Government; and that is the situation in which we ought to endeavour to place her."

Thus was she placed. The Treaty of Paris, signed on 20th November, 1815, was not only lenient but magnanimous. An indemnity of 700,000,000 francs was imposed and a small strip of French territory around Marienburg, Saarbrücken, Landau and Chambéry was surrendered.

Fortunately for ourselves, for Europe and for the nineteenth century, Wellington was as great a statesman as he was a soldier.

Evening Standard, 25th March, 1944.

CASSINO

WHEREAS the Russian campaign in the Ukraine was based on inspiration, ours in Italy, and I am sorry to have to write it, would appear to have been based on perspiration—not the manipulation of ideas, but the heaving of things. In the one the unexpected dominated, in the other the conventional has been the rule.

Though this unpalatable conclusion is largely due to the narrowness of the Italian theatre of war and its mountainous character, I cannot help feeling that it is also due to a reluctance in taking risks.

If it were possible, as it was, for Marshal Koniev's men successfully to cross the Dnieper on tree trunks and cottage tables, was not it possible for us to have done something better than we did at Nettuno? Again, if it were possible, as it was, for General Malinovsky's soldiers to storm a strong position at night with "cold steel and hand grenades" and without artillery support, was it really necessary to subject Cassino to a seven hours' air and gun bombardment, which, with pride, we have been told was "unsurpassed in the history of warfare"? Also, and with relish, that 1,400 tons of bombs were dropped on a target of less than one square mile, "the smallest area ever to receive so great a weight of bombs in such a short space of time".

Of this "Alamein-crack", as one eyewitness called it—which, incidentally, is no other than a 1917-bang—General Eaker, commanding the Mediterranean Air Forces, is reported to have said on the day of the cataclysm: "The efficiency of the bombing would be determined by the extent of the ground forces' advance." And then: "Let the Germans ponder that what we have done on the Ides of March to the fortress of Cassino we will do to every stronghold where they elect to stand."

Well, I hope not, for after a fortnight the extent of the advance would seem to be, if anything, in the wrong direction. Further, why not vary the tactical dish? Is not this what the Russians have done time and again, and is not variety the secret of their enormous appetite?

Another eyewitness informs us: "Chiefs of the Allied Air Force have always argued that by pounding enemy positions with a terrific weight of bombs you could so stun and disorganize them that ground forces would in effect merely have to occupy the paralysed territory. To-day this theory was tested in a way that has never been attempted before."

"This theory"—indeed! A busted old flush proved 100 per cent wrong at the battles of the Somme, Verdun and Passchendaele, at Madrid and the Alcazar and again in this very war at Leningrad and Stalingrad!

Within twenty-four hours of the cataclysm opening, another eyewitness tells us that the great bombardment did not kill all the defenders off, "nor did it reduce them to such a state of shakiness, etc., etc." Well, did the bombardments at the Somme, Verdun, etc., etc.?

The fact is, that in spite of the topographical differences of the two theatres of war, and both have their respective difficulties and special problems, whereas the Russians have jumped right forward of the German tactics of 1941-1942,

ever since the battle of El Alamein we have jumped straight back to those of 1916-17—the mass artillery battles of the last war.

Then we put down bombardments in scores of thousands of tons of shells, and created not only an area impassable to forward movement, but also a shell-hole fortress for the Germans to oppose us from. Now we have repeated this folly.

Within a few hours of the assault being launched, in came tumbling reports such as these: "Armour supporting our infantry was delayed by rubble" . . . "Early reports state that the advance is restricted by terrible devastation" . . . "Remnants of buildings and masses of debris have been transformed by the enemy into strong points."

This is 1916-1917 over again in every detail but one. Then we threw in masses of troops and suffered masses of casualties.

Are we unteachable? As the Russians learned from the Germans, why cannot we learn from the Russians? Cottage tables—think of that! Cold steel and grenades—think of that also!

No, General Eaker, it is not the Germans who should ponder what we did on the Ides of March. It is we who should ponder. And if what we have done to Cassino is what we are going to do to every enemy stronghold right up the leg of Italy, were I a German, I should say, "Thank you."

10th April, 1944.

IS BOMBING SHORTENING THE WAR?

IN a recent number of *The Times*, the head-line "Bishop's Support of Bombing" caught my eye. Then I read: "I favour bombing in this war without any hesitation at all . . . in order to shorten the war and save the lives of many men," said the Bishop." I refrain from giving his name, because there are so many Fathers in God like him, and have always been since Odo, Bishop of Bayeux, brother of William the Conqueror, rode by his side at Hastings with war-club in hand. Though to shed blood by sword or spear was against the canons of the Church, to crush head-pieces and heads was—with a wink—sound Christian doctrine.

However, is the Bishop right—right tactically if not morally? In other words, will mass bombing shorten the war? Has it already shortened it, seeing that since 30th May, 1942, when 1,130 bombers of the R.A.F. attacked Cologne, some 250,000 tons of bombs have been unloaded on Germany? In brief: Is the Douhet theory of war right or wrong—namely, hit the cities and the armies collapse? If right, the end of the war is in sight. If wrong, what then?

According to the adherents of neo-Douhetism, the problem is one of reconstruction as much as of destruction—that is, the man-power involved in cleaning away and repairing the damage, etc. Thus, it has been estimated that the 1,500-ton attack on Kassel cost the Germans 80,000,000 man-hours. Double this, treble this and so on, and ultimately German man-power will be bled white. Let us now examine this argument.

It is estimated that the total industrial target area on which the bulk of German war industry depends is 130 square miles in extent. That, by the end of February 1943, 60 per cent had been attacked and one-thirteenth of this 60 per cent destroyed. That, by the end of October, the same year, "the total built-up area attacked had risen to more than 70 per cent", and of this "one-quarter had been destroyed"—that is, $17\frac{1}{2}$ per cent of the 130 square miles. To-day this percentage must have risen to about 25 per cent.

In spite of this crippling loss, and the terror coincident with it, it is a little disconcerting to read that, according to some of the Americans who recently arrived in Lisbon from internment in Germany: "To imagine for a moment that Germany is starving is nonsense," and—"some go so far as to assert that civilian morale has actually been raised by the bombardment." What, then, of the 25 per cent loss? It is impossible to say. Nevertheless, light has been thrown on this question in last month's number of that well-known English monthly news-sheet—*Review of World Affairs*.

In it it is pointed out that there are in Germany 105 cities with populations exceeding 50,000; in all 35.8 per cent of her total population. And that it would probably take 1,000 raids on a heavy scale to destroy them. Further, should three such raids be carried out weekly throughout the year, "the programme would take over six years to complete".

Again, excluding Berlin, there are 54 cities with populations of over 100,000, containing 25 per cent of the total population. "To destroy these it would take at least 10 raids of about 1,000-bomber strength apiece. This, at the rate of three raids per week throughout the year, would take over three years."

Now comes the interesting point. According to the writer, as Western Russia was occupied and not merely bombed, "The blow therefore was heavier than anything which could be dealt from the air." In June 1941 Russia's total population was 184,628,000, but by December 1942 it had been reduced to 126,000,000—that is, 58,628,000 people were lost, or over 30 per cent. Further, the loss in foodstuffs was 38 per cent, in electrical power and coal 50 per cent, in iron and steel 60 per cent, in manganese and aluminium 50 per cent, and in chemical industries 33 per cent. Therefore, in December 1942, Russia's loss was incomparably greater than anything bombing is likely to achieve in Germany for a long time to come. Nevertheless, we know what the Russians have since accomplished.

Is, then, the Bishop right? Is mass bombing shortening the war? The Russian answer is definitely—"NO!" Otherwise, why should Stalin press again and again for a Second Front? As regards saving life—yes, that is self-evident. But unfortunately for the Douhet school, Stalin, though anti-German, is nevertheless pro-Clausewitz. What did the great German write? This: "Only great and general battles can produce great results." Certainly this has been proved to the hilt in Russia, whereas the bombing of Germany is still no more than an experiment, and, be it noted, an extremely costly one, for each four-engine bomber lost is £100,000 worth of man-power hours gone west.

11th April, 1944.

AFTER THE TANK, WHAT?

IN the current number of that well-known American technical journal, *Army Ordnance*, there appears an article entitled "After the Tank, What?"

In brief, its writer's argument runs as follows: The tank was introduced because nothing more could be done to protect the foot soldier against machine-gun and rifle fire. In 1939-41 it reached its zenith, and now it is in its decline, because very little more can be done to protect it against anti-tank weapons. As he writes:

"We have practically reached the limit in the weight and speed of tanks, in the driving power we can put into them, in the fire-power we can give them, and the armour we can put on them."

Lastly comes: "*What follows the tank?*" As no answer is vouchsafed, I can only suppose that the writer is stumped by his own question. No wonder, for his error is a common one—he will not or cannot think simply. Let us have a try.

A man is not a weapon; he is a one-tenth-horse-power creature who can carry weapons or a load. And, so long as he is the sole means of carrying weapons or loads, infantry warfare continues whatever the casualties may be.

So also with the horse. It is not a weapon; it is an animal approximately ten times as powerful as man. It can carry a man and his weapons or haul a weapon or a cart. So long as more powerful means do not exist, it continues to do one of these things, and, therefore, remains indispensable for purposes of war. Even as late as the First World War we shipped 804,231 horse overseas.

This remained true until the last quarter of the nineteenth century, when the invention of the internal combustion engine led to the introduction of the motor car, a self-propelled vehicle of ten to fifty horse-power. Here, indeed, was a revolution in motive power which challenged the horse, not the man, because wars can be fought without horses, but without men—never.

No one suggested that the motor car was a weapon, not even Lieut.-Colonel Layriz of the German Army, who, I believe, was the first soldier to write a book on its uses in war. Therefore, why, as is common opinion, should an armoured car be classed as a weapon? It is no more than a bullet-proof motor car.

True, it can carry weapons or be equipped with them, but that does not transform it into a weapon any more than a horse is changed into one when a man with a lance gets on to its back.

Therefore, why should a tank be called a weapon, for it is but an armoured car on caterpillar tracks instead of wheels? It is a vehicle and nothing else—so, incidentally, is the aeroplane. It is a self-propelled, armoured vehicle and its functions are those of a bullet-proof horse.

Do you agree? If you don't, you must be a "b.f."; if you do, then you are war-minded and not merely tank-minded, for whether you are an infantryman or any other kind of soldier who has smelt burnt powder, you will realize

this: so long as the internal combustion engine maintains its superiority in motive power, and so long as armour can be made bullet-proof, so long will the two in conjunction be used in war.

Were the soldier only war-minded—that is, looking on war as a whole instead of in armament packets—long before the present war he would have set out to remodel his army round the bullet-proof vehicle. He would not only have built tanks—combat bullet-proof vehicles—but also bullet-proof, cross-country supply vehicles. He would not merely have thought of hauling his guns by means of tractors, armoured or unarmoured, but would have mounted them on bullet-proof vehicles. Further, he would have moved his infantry in bullet-proof vehicles instead of, as still to-day, in lorries. In short, he would have built his army round the petrol engine, armour, the caterpillar track and the gun, as armies of old were built round the horse, armour, the wheel and spear.

But he would not become war-minded. Instead, he would remain infantry-minded, or cavalry-minded, or artillery-minded, or tank-minded, or anti-tank-minded, or air-minded. He looked on his own department as *the* business, and not on the business as a single power plant.

I have been proclaimed a false prophet, because before the war I advocated a small army in place of the mass armies of 1914-18. Certainly I did so, yet not a small army only, but a small *mechanized* army, which makes all the difference. And I maintain that, when the crash came in 1940, had we had an internal combustion engine army of no more than six divisions strong, there would have been no Dunkirk; instead, in all probability, a German Sedan.

When a soldier sets out to propose the type of army required for the next war, rightly he considers the opening phase of that war, and not those which, because of the non-acceptance of his ideas, happen to follow it.

Thus, I maintain that had the Germans been really war-minded, they would have decisively beaten the Russians in 1941, because their supply vehicles would have been tracked instead of wheeled, and in consequence their armoured forces could then have operated with far greater freedom. It was not their tanks which were at fault, it was their brains.

Let us turn now to the combat tank, the armoured, armed and self-propelled vehicle. As in the days of cavalry, heavy cavalry could never break through a solid front of determined spearmen, combat tanks cannot break through an unbroken front of determined anti-tankmen, whose shells (spears) can penetrate tank armour (horse hide).

When such fronts do not exist, tanks can still charge home, as cavalry continued to do up to the nineteenth century—so long as a gap was to be found. But, on account of the ever-increasing power and number of anti-tank weapons, these fronts are rapidly becoming rare. And should it be accepted that armour has now reached the limit, when gaps are not to be found, then it must also be accepted that an enemy's front is tank-proof.

Nevertheless, this does not mean that the tank is obsolete, any more than in the days of Alexander the Great it meant that cavalry—his decisive arm—was obsolete because it could not successfully attack an unbroken line of spearmen. As we know, with a few intervals—due generally to the stupidity of the soldier—cavalry remained the decisive arm up to the middle of the eighteenth century—that is, for over 2,000 years.

If the tank cannot charge anti-tank weapons—that's that. Yet this does not prevent the tank from manœuvring round anti-tank weapons, as, from all appearances, Marshals Zhukov and Koniev as well as General Malinovsky have so successfully demonstrated during the last few weeks.

Therefore, what is required is a change in tactics, and not a weapon which cannot as yet be imagined. Such a change generally carries with it a change in organization, in administration, and sometimes also in command.

It may be that a time will come when combat tanks are no longer able to manœuvre on the battlefield. But even this does not mean that the tank will be scrapped, any more than in the last war it meant, because cavalry could so seldom manœuvre, the horse was scrapped. What it will mean is that the combat tank will become purely a reconnoitring arm for an army of tank-carried infantry, tank-carried artillery and tank-carried munitions and supplies—let us hope.

So it seems to me, "After the Tank, What?" is not a very intelligent question. About as silly as 200 years ago it would have been to ask: "After the Horse, What?"

What indeed? Watt had not yet dreamt of his steam engine. Therefore I predict that in one form or another—even in a flying form—the tank will remain a vehicle of war until man discovers a source of energy as superior to present motive power as that power is superior to human and animal energy. What it will be, Heaven alone knows!

Evening Standard, 5th April, 1944.

20

BRICKS AND BLOOD

I AM not concerned here with the rights and wrongs of blowing up monasteries and historical monuments; but instead, with the lofty sentiments such happenings have given birth to. For instance, Lord Latham has told us that "No one could justify the loss of one single life in order to save a building," and Lord Geddes has declared: "The thing they hated most and feared most was, not that these material creations of the human spirit should be lost, but that the greatest creation of the human spirit, the whole of Christian civilization of Europe should be lost."

Magnificent—yes! magnificent in war.

But, what about peace—the peace which generated the war, and which is, therefore, the true culprit? Were these sublime sentiments then voiced? No! In those days it was cheaper to bring a baby into the world than a pekinese pup. Millions of people rotted in slums because blood was priced lower than bricks, and millions more in distressed areas because money was valued more highly than blood.

To these outcasts of Christian civilization war came not only as a relief, but as their liberator.

The nation was regimented, unemployment vanished and wages rose. Next, two portentous things happened. First, the wealthy were wiped out by taxation; a minimum of half their incomes was taken from them and a

maximum of nineteen shillings and sixpence in the pound. Secondly, the bulk of the people, both men and women between the ages of eighteen and fifty, was massed into two vast groups—the war workers and the war fighters. Thus a totally new order of society came into being—the factory-barrack order. The symbol of this order is the crossed hammer and rifle.

With us, at least, and from the standpoint of popular psychology, the war may be divided into two clearly defined periods—the Churchillian and the Stalinian.

During the first the people were united in an invincible solidarity under Mr. Churchill—their hero; "sweat, blood and tears" was their slogan.

This hero-worship held firm until the German *débâcle* at Stalingrad, since when a subtle change has set in; for, to-day, the great mass of the people not only accept without argument that the war will be won—is all but won—but that Stalin is the winner. No word is to be breathed against Russia—try it in the Press or on the platform. Not only the valour of her soldiers but also the peculiarities of her social and political system are sacrosanct. Together, they are swallowed in one gulp like some mystical eucharist.

For us English, this is an astonishing transubstantiation; nevertheless, actual and psychologically real as are all obsessions to the obsessed. Stalin is now the Joan of Arc of ecstatic British multitudes.

Watching the war clouds dissolving in the newspapers, and the rain of blood drizzling to its end, the war workers—the men of bricks—are thinking more and more in terms of bricks. This is what Mr. Ernest Young, ex-M.P. for East Middlesbrough, has written:

"Whenever large bodies of workers are gathered together, the problem associated with post-war reconstruction engenders more interest than those connected with the strategy and tactics of the war itself."

As peace draws nearer, the more anxious do they become. What of their jobs, their scattered families, their future homes: what of slums, unemployment and distressed areas? And beyond all these perturbing thoughts gleam the spires and towers of the New Jerusalem—Stalinite Russia: State control, State ownership—the State is God and Stalin is his prophet.

It is no good scoffing at this dream, for it can only be countered by the vision of a New Britain. And, so far as I can see, neither Tory, Liberal nor Socialist has any clear idea what this means, let alone a visible plan. Lord Woolton has told us that we shall "find ourselves having occupationally to move some 10,000,000 people. Probably 5,000,000 of them . . . in a comparatively short period of time." But where to? Is it to be back into the slums and bomb-blasted houses, or into the residences of the once rich, which at best can accommodate but a fraction?

If in war it is right that no one can justify the loss of one single life in order to save a building; then it is also right that nothing can justify the return of the people to the hovels millions inhabited before the outbreak of war. Therefore to build for peace is as essential as to destroy for war.

From the men of bricks I will now turn to the men of blood—our soldiers, sailors and airmen. Where do they come into the picture?

Scattered over the five continents and the seven seas, indifferently paid, holding life cheap and inured to desperate deeds, when the war ends, unless decent homes can be found for them, are these men going to emulate their

predecessors in the South African and First World Wars, by trudging the gutters with bootlaces in their hands? I think not, and I hope not, for that would mean the end of England.

In 1902 and 1919 there was no political alternative to our Parliamentary system of government. Now there is Stalinism in a variety of forms. The air is full of political ideas—Brighton, West Derbyshire and other by-elections are straws in the wind which point to this.

These men—we call them “boys”, but they have grown old in the sorcery of war—who have sweated and bled without weeping, will demand justice, a word which so often is on our rulers’ lips and so seldom in their hearts. These men also will demand a share in the good life.

It is here that I foresee extraordinary possibilities: once again a clash between the haves and the have-nots. This time, not between rich and poor, but between workers and fighters: those who hold jobs and are earning wages never before earned by them during peace-time, and those who lost their jobs and for a few shillings a day bled for their country.

I am not one who would welcome a revolution. I have an inborn horror of popular risings—I have watched the Spanish Civil War as a close-up. Yet I am certain of this: unless the Government sets about winning the peace, not the world peace but the home peace, now, immediately and during the war, it will risk losing that peace for a generation. Fine feathers make fine birds, but fine promises, if unfulfilled, make fine turmoils, more especially so in an age when everything is in the melting-pot.

If a single life is worth more than the most sacred or historic of buildings, why are we not now building for life—a life of decency and contentedness? If the thing we fear most is the loss of the Christian civilization of Europe, why do not we set to and found that civilization here at home?

The excuse is the war. But I say that there is something more urgent even than that—it is the peace for which it is being fought. War is but the means to that end, it cannot be that end itself. If we do not build the ark now, where shall we find sanctuary when the floods descend—the floods of demobilized humanity?

The Leader, 8th April, 1944.

CLAUSEWITZ AND OURSELVES

STRANGE to say, though in literature and in the arts and sciences we have never lacked great writers, and can hold our own with any nation, the number of our great military writers is negligible.

For instance, we have never produced a Machiavelli, a Guibert, a Jomini or a Clausewitz. And this is all the more remarkable, seeing that, during the last 300 years, no other nation has been engaged in so many wars as we have been. Thus, between the battle of the Boyne, fought in 1680, and the battle of Waterloo, we spent 70 years at war, and from 1815 to 1914 the number of small wars to our credit is in the neighbourhood of sixty.

With such vast military experiences to draw upon, how comes it that we

can point to no single author who reviewed war as a whole, whereas Prussia, whose history from the days of the Great Elector to 1913 was far more war-free than that of any other of the greater European powers, produced Clausewitz, by common consent the foremost war philosopher of any age?

The answer is simple. Prussia—now Germany—from the age of Frederick William I, father of Frederick the Great, steadily turned war into a cult. We, throughout our Imperial history and up to 1899, looked upon it purely as a business. Whereas Clausewitz, saturated as he was with Frederician and Napoleonic lore, saw in war a continuation of State policy by other means, we saw in it a continuation of commerce pure and simple.

There can be no possible doubt which outlook proved the more profitable. The cult led Napoleon to St. Helena and William II to Doorn, and the business expanded us from an island into an Empire covering a fifth of the globe. Therefore, it seems to me we should be thankful that Clausewitz was not born an Englishman.

The reason for these two outlooks is to be discovered in geography. We, as a naval power surrounded by water, could freely move anywhere; therefore our strategy was one of space. Prussia, as a land power surrounded by potential enemies, could freely move nowhere; consequently her strategy was one of force. Out of these two strategies evolved two very different theories of war: on the one hand, limited war, and on the other—absolute.

So long as we held command of the sea, being unrestricted and unattackable, we could select our theatres of war at will; whereas Germany, a centrally placed land power, was not only blocked on all sides, but on all sides was also open to attack; therefore her theatres of war were definitely fixed. Whilst to her war was a question of self-preservation, to us it was a question of self-ratification.

It is for those reasons, since her rise to power, that Prussia has been a country which feared war, whereas we, and long before her rise, were a power which relished war. She could be attacked in her home lands, we could never be. Contradictory as it certainly is, this is why we have always considered ourselves pacific, and since the days of Bismarck have written down Germany as bellicose. Geography is at the bottom of these differences, and not some innate goodness or badness in human nature.

Let us now look at these two systems of war.

Absolute war we know; it is war as fought to-day, not for war's sake—that would be absurd—but for power's sake. The enemy's armed forces must be annihilated, his civil population demoralized, his industries destroyed and his Government overthrown. Such is the logical end of Clausewitzian warfare—unlimited, absolute, total. It is ferociously Darwinian and militantly Marxian.

Our limited system of war, which we followed with unique success until 1899, was very different. It has been ably analysed by Captain Liddell Hart in the opening chapter of his *The British Way in Warfare*, and also touched upon by T 124 in the last chapter of his *Sea Power*. As the first of these writers points out: Whereas "absolute war is a war in which the conductor does not know when to stop", limited war is "to make war with profit and make peace when a war ceases to promise profit".

This system was governed by that much maligned principle the balance

of power—a corollary of the strategy of space. In simplest terms it was this: We objected to any Continental nation establishing a hegemony over Europe, because such an accretion of power would threaten our command of the sea, and by threatening it would also threaten our commercial supremacy. To prevent this we allied ourselves to the second strongest power or to a group of powers, and when war came we fought the strongest as cheaply as we could, until his strength was reduced to a balancing level. Then we made peace with him.

To have annihilated him would have violated this principle, because, were he reduced to impotence, the second strongest power—probably our ally—would have stepped into his shoes. The best book on this principle is not by an Englishman but by an American, Colonel Vesta, and it is called *The Maintenance of Peace*.

This highly profitable system of waging war was followed by us until 1899, when in the Boer War we began to violate it. Next, in 1914, we cast it aside and, against all our native instincts, slipped on to the absolute path without any of the traditions or experiences of absolute war to fortify us. As Captain Liddell Hart writes:

"In the last war we proclaimed our intention to fight to a finish, until the German armies were beaten to the ground, and the German Emperor was lifted off the ground—by his neck." He adds: "It is an ironical if perhaps natural coincidence that in borrowing our military headgear from Germany we should also have borrowed its contents."

Certainly we, as one of the Allies, won that war, but was it a profitable winning? Listen to this; as late as 1932 Liddell Hart could still write: "To-day we are suffering not from exhaustion of the body, political and economic, but from exhaustion of the spirit." And, as now we are fighting that same type of war over again, the probability is that it will leave us still more exhausted.

The tragedy is this: though by the greatest of good luck we never produced a philosopher on absolute warfare; by the greatest of bad luck we never produced a Clausewitz on limited warfare.

The nearest approach to such a writer—and yet how far distant—was Robert Jackson, an army doctor who, in 1804, published a book entitled *A Systematic View of the Formation, Discipline and Economy of Armies*. It is not a treatise on generalship, let alone politico-generalship, as is Clausewitz's *On War*. Instead, its subject is soldiership in all its forms.

Jackson was no lover of war, for he wrote: "The history of the human race is little more than a catalogue of wars, massacres, and robberies. The picture is often revolting—such as the eye cannot sustain with patience."

His leading idea is not that of Clausewitz—namely, "the nation in arms". Instead, it is a small and perfect army—an instrument so essential to the strategy of space. He wrote: "If the British empire is to be defended by a regular army, it is evident that the object will not be ensured, unless that army be of the best quality. It is in pre-eminence of quality over others, rather than in quantity of numbers (which he calls 'the Prussian system of war'), that the value of a military force consists."

Seeing what a wonderful field of war Jackson could have drawn upon had he gone deeper into his subject, he might have written, let us say, a book called *On Limited War*. And had he done so and had that book been studied

by our soldiers and statesmen as *On War*—better named, *On Absolute War*—was by our present enemy, we could not have fought the last war on Prussian lines—that is, in accordance with the strategy of force instead of the strategy of space. And, had we not so fought it, even had the present war occurred, which is highly improbable, never could the ultra-Clausewitzian slogan of Unconditional Surrender have obliterated the memory of that traditional strategy upon which our former greatness was founded.

Tragedy of tragedies, now that our system of war has been completely Prussianized, it is too late to recant. Henceforth we swim or sink with Clausewitz.

12th April, 1944.

22

OUR SOLDIERS OF TO-MORROW

IN those not so far distant days when millions of us were groping in the miasma of Geneva, one statesman after another cheered our way by proclaiming that war accomplished nothing, absolutely nothing except universal ruin. Nevertheless, strange to say, since war has returned, we have been urged, even by some of these very men, to fight to the bitter end in order that liberty, justice, security, fraternity, and so on, may not perish from the earth.

In 1935, were anyone so bold as to hint that we should rearm, he was forthwith dubbed a Fascist. And, to-day, should anyone be so perverse as to suggest that the world should ground arms, this is a certain proof that he is a Nazi.

A mad world? Yes, so long as the multitudes remain gullible. Yet, to be wise, not so mad as on the face of it it appears; for though war can destroy in order to create, also it can destroy in order to annihilate. And which of these courses it runs depends upon what we call "civilization" and the part the soldier plays in it.

So long as he, as officer, is no more than a pleasant blockhead, or, as man, an illiterate ruffian, all is well and we are safe. He will do what he is told, whether he understands it or not. He will toil, sweat and never weep for a shilling a day, out of which ninepence has been deducted for hair-cutting and necessaries. And should he survive drink, fever, vice and battle, so patient and bovine does the Army leave him that he will spend the rest of his beer-sodden life standing in the gutter selling bootlaces and matches.

Reader, do you realize that, in the good old days of Merry England, our army was a kind of lethal chamber in which we exterminated our social misfits? Do you realize that in the days of the Duke of Wellington, when that great soldier called for reinforcements, we scoured our stews, gin shops and jails, and poured their human wreckage into his army? Do you know—of course you don't—that shortly after my regiment returned from South Africa in 1902, I was ordered to parade my company, so that a detective might seek some malefactor he suspected had enlisted? Though he was not there, after the parade had been dismissed, that detective turned to me and said: "Well, sir,

did you but know whom you have in your company you would not sleep quietly in your bed."

Yet it was these aristocratic nincompoops and these beery ruffians who won and held our Empire. I once reckoned up that between 1832 and 1932 they had fought over 50 wars of one kind or another, and so successfully that most of their names have long been forgotten. Thus, all said and done, war can accomplish a deuce of a lot. For us, at least, it gained a fifth of the globe, and simultaneously liquidated most of those who did the dirty. That is a record, indeed, shall we say—"creative"?

To change the subject and yet stick to the point. I am sure the reader will agree with me that great men are apt to create great ructions. To name a few, Mahomet, Luther, Rousseau, Darwin and Marx. Therefore, I think he will also agree with me that had the world seen, say, sixty Great Captains instead of six, the ructions of war would have been beyond computation. In my opinion, this is exactly what is about to happen. Hitherto the world has little cultivated military genius; but to-day, the nations stand on the threshold of its mass production. Great Captains are about to be manufactured, as scientists are, by the dozen.

During the last hundred years but one great war scientist emerged—Clausewitz—and he has caused ructions enough. Yet he lived and wrote in an all but pre-scientific age, and now that science is the world religion, with the Machine as its god, chemical equations as its invocations and battlefields as its sacrificial altars, we may expect a veritable spate of military high priests.

Weigh well the words of Lewis Mumford: "War is the supreme drama of a completely mechanized society . . . as long as the machine remains an absolute, war will represent for this society the sum of its values and compensations. . . . War sanctions the utmost exhibition of the primitive at the same time that it deifies the mechanical." Holy, holy, holy War!

Day by day war is becoming more and more scientific. As thousands of scientists are now engaged on designing exquisite instruments of destruction, more and more do these weapons of death demand a new type of generalship and soldiery. They demand not only tacticians but technicians. Grand technicians and minor technicians: men of brains and not merely of nincompoop and ruffianly brawn.

After the war we are going to maintain a vast army and an increasingly scientific one, if only because the stranglehold of unemployment will force this conclusion on all the victors. There will be competition between them, and we know what that means: friction, heat, a spark and lastly explosion.

As wars follow wars in geometrical progression—remember this age in which we live is the Wardom predicted by Oswald Spengler and more soberly forecast by Arnold Toynbee in his monumental analysis of the life history of civilizations—increasingly will soldiers be recruited from the élite of the nation. The men who now become our ablest scientists, engineers, chemists, surgeons and so on, are those from whom our future officers will be selected. For war will be the science of sciences, the science which in an Age of Wardom will determine whether we live or perish. Also, as regards the men—the private soldiers—they will be recruited from the highest grades of skilled labour, if only because the machines of war will equal in intricacy and cunning the machines of peace.

What does this mean? A return to the Companions of Alexander the Great, to the Prætorian Guards of the Cæsars and the Janizaries of the Sultans. But, this time, on the highest intellectual level.

Will these men be content with a few shillings a day, and will they submissively listen to arguments about inflation? No, like their prototypes, they will not only demand but collect their donatives at the sword or tank point. They are the aristocrats of their age, and as such they will insist on being treated. To the all-mighty, might is right because it pays.

They, and not the bankers of to-day, will be the supreme power in the land, for blood is mightier than gold. They will not only control politics but be politics. To them, war will not be a continuation of policy by other means, but policy a continuation of war by identical means—brute force. They will want war for war's sake, if only to demonstrate their skill, revel in their cunning, and win favours of their mistresses and other men's wives. They will smash empires as the Companions smashed Alexander's. They will make and unmake governments as the Prætorians made and unmade Cæsars and the Janizaries Sultans.

As history makes clear again and again, when the military mind dominates, civilization crumbles to dust, because the whole outlook of the soldier is destructive, his *raison d'être* is to destroy and not to create. As Mumford points out: "In the act of making himself a master, the soldier helps create a race of slaves."

Thus it comes about that of all the problems which face us and the world in general in this rapidly evolving age of power politics, in which the new "isms" are but the limping forerunners of Wardom, the most portentous is the Advent of the "Thinking Soldier".

So it seems to me, when once again the footsteps of the Prætorians clang on the pavements of the world, it will also come about that we shall wistfully and longingly look back on the good old days of the numskulls and the rapscallions, wondering how it could ever have been that these primitive and useful creatures were the jests and jibes of a past music-hall civilization. Those poor, unthinking loons who once won for us the flesh-pots of Egypt and for themselves a beat along the gutters of the Strand.

Evening Standard, 19th April, 1944.

CHEMICAL WARFARE, ITS ORIGINS

THE first recorded use of gas as a weapon of asphyxiation, and a none too certain one, is made by Thucydides. He informs us that in 429 B.C., when Archidamus, King of Sparta, laid siege to Platæa, after direct means had been frustrated, he ordered faggots to be heaped up against its walls, and then "lighted the wood by setting fire to it with sulphur and pitch". This attack failing, the city was besieged.

The tactics of smoking out an enemy by means of sulphur, pitch and other combustibles was at times resorted to during the Middle Ages. Yet, surely,

one of the most extraordinary variants of attack—bacteriological rather than chemical—was that made by Coribut on the town of Carolstein in 1422.

Varillas, a seventeenth-century French historian, informs us that he "caused the bodies of his soldiers, whom the besieged had killed, to be thrown" by his engines "into the town in addition to 2,000 cartloads of manure". Whereupon "A great number of the defenders fell victims to the fever which resulted from the stench, and the remainder were only saved by the skill of a rich apothecary."

In spite of these early attempts to speed up siege work, it was not until the opening of the last century that the first serious proposal to use poison gas as a weapon was made. In 1811, Admiral Lord Cochrane, later tenth Earl of Dundonald, one of the ablest seamen this country has known, had, when in Sicily, noticed that the fumes from the sulphur kilns destroyed vegetation and endangered animal life. At once the idea occurred to him that sulphur could be turned into a formidable weapon, and on his return to England he suggested this possibility to the Prince Regent. On 12th May, 1812, his proposal was forwarded to Lord Melville, who, apparently, pigeon-holed it.

Nothing further would seem to have occurred until the outbreak of war in the Crimea, when, in July 1854, Dundonald once again returned to the charge, submitting his "secret plan" to the then First Lord of the Admiralty—Sir James Graham. In his covering letter he wrote :

"Were it necessary—which it is not—that I should place myself in an arm-chair on the poop, with each leg on a cushion, I will undertake to subdue every insular fortification at Cronstadt within four hours from the commencement of the attack," and Sebastopol could be as easily captured.

The main item in his scheme was to use 2,000 tons of coke, and burn on it "four to five hundred tons of sulphur".

Graham consulted Lords Palmerston and Panmure—Prime Minister and Secretary of State for War—and in the correspondence which ensued we find Palmerston writing to Panmure as follows :

"I agree with you that if Dundonald will go out himself to superintend and direct the execution of his scheme, we ought to accept his offer and try his plan. If it succeeds, it will, as you say, save a great number of English and French lives : if it fails in his hands, we shall be exempt from the blame, and if we come in for a small share of the ridicule, we can bear it as the greater part will fall on him."

As Sebastopol was stormed early in September, apparently the scheme was dropped.

These proposals were first made public in *The Panmure Papers*, published in 1908, and it is generally supposed that the Germans obtained from them the idea of using lethal gas. This, however, seems doubtful, because, between 1855 and the launching of the first gas attack in 1915, many suggestions concerning the use of gas as a weapon crop up.

For instance, in 1864, a certain Mr. B. W. Richardson aired his views on this subject in the *Popular Science Review*. His idea was to distribute "lethal agents, within the breath of which no man, however puissant, could stand and live". Further, he wrote :

"From the summit of Primrose Hill, a few hundred engineers, properly prepared, could render Regent's Park, in an incredibly short space of time,

utterly uninhabitable : or could make an army of men, that should even fill that space, fall with their arms in their hands, prostrate and helpless as the host of Sennacherib.

"The question is, shall these things be? I do not see that humanity should revolt, for would it not be better to destroy a host in Regent's Park by making the men fall as in a mystical sleep, than to let down on them another host to break their bones, tear their limbs asunder and gouge out their entrails with three-cornered pikes : leaving a vast majority undead; and writhing for hours in torments of the damned?"

Strange to relate, in the same year in which Mr. Richardson wrote this somewhat turgid stuff, a more practical suggestion was made, and this time in the United States, then in the throes of the Civil War. In June 1864, we find the Confederate General Pendelton asking the Chief Ordnance Officer at Richmond whether he could not supply him with "stink-shell", which would give off "offensive gases" and cause "suffocating effect". The answer he got was : "Stink-balls none on hand, don't keep them ; will make if ordered."

Many other such proposals must have followed ; for, according to the *Army and Navy Register* of 29th May, 1915, "among the recommendations forwarded to the Board of Ordnance and Fortifications there may be found many suggestions in favour of the asphyxiation process, mostly by the employment of gases contained in bombs . . . with varying effects from peaceful slumber to instant death. One ingenious person suggested a bomb laden to its full capacity with snuff, which should be so evenly and thoroughly distributed that the enemy would be convulsed with sneezing, and in this period of paroxysm it would be possible to creep up to him and capture him in the throes of the convulsion."

That by the end of the last century the idea of using poison gas had become more than a "secret plan", is proved by the fact that, in 1899, several of the greater powers pledged themselves at the Hague Conference not to use projectiles which gave out suffocating or poisonous gases. Though Germany signed this agreement, on 4th September, 1900, the United States never did, and as regards the use of gas in shells, Admiral Mahan, one of the American delegates, said :

"The reproach of cruelty and perfidy . . . was equally uttered previously against fire-arms and torpedoes. . . . It is illogical and not demonstrably humane to be tender about asphyxiating man with gas, when all are prepared to admit that it is allowable to blow the bottom out of an ironclad at midnight, throwing four or five hundred men into the sea to be choked by the water. . . ."

Though the Hague Congress of 1907 expressly forbade the use of "poisons or poisonous weapons", devices which did not entail death were, nevertheless, allowed. Experiments in non-toxic lachrymators (tear gases) were, therefore, carried out, and early during the First World War were further tested. Thus, on 27th October, 1914, at the battle of Neuve Chapelle the Germans fired shrapnel containing an irritant (dianisidine chlorsulphonate) but with no success. Next, on the Russian front, in January 1915, they used shells containing a strong lachrymator (xylyl bromide) ; but, on account of the low temperature, they were ineffective.

At length, on 22nd April, 1915, the first great poison gas attack in the history of war was launched. That day, in the Ypres area, where conditions were

ideal, the Germans released from cylinders great clouds of chlorine gas. The effect was appalling, for their opponents—the French Turcos and the Canadians—were totally unprotected against it.

Now comes, perhaps, the strangest item in this story. When, in 1854, Dundonald was pressing the adoption of his "secret plan", Dr. J. Stenhouse invented a charcoal respirator through which chlorine, when slightly diluted with air, could be breathed with impunity. In a description of it which appeared in the *Transactions of the Royal Scottish Society of Arts* of 1854 we read:

"The longing for a short and decisive war has led to the invention of 'a suffocating bombshell', which, on bursting, spreads far and wide an irrespirable or poisonous vapour: one of the liquids proposed for the shell is the strongest ammonia, and against this it is believed that the charcoal respirator may defend our soldiers. As likely to serve this end, it is at present before the Board of Ordnance."

Thus it came about that, in April 1915, that Board assembled once again.
22nd April, 1944.

24

POISON GAS!

THE horror which swept over the world when the reports on the first gas attack of 22nd April, 1915, were published was genuine, natural, and illogically right. It was genuine in that man, in spite of all his wickedness, is not a devil incarnate, and lethal gas, as I will show, is a torturing more than a killing weapon. It was natural, because all things new, and more especially those which suddenly occur, antagonize man's conservative spirit. And it was right because, in spite of all its economies, cold steel and the bullet better express the temper of Western man than does poison, which to him is Satanic and Oriental—even horses instinctively shy at a snake.

Be these personal observations right or wrong, in the realm of cold logic facts speak for themselves, and, so far as the last war is concerned, they show clearly that poison gas is far less destructive of life, and incalculably less so of property than high explosives. Therefore, a few facts and figures may not lack interest, especially as to-day all belligerents are prepared to use gas, and at any moment a mere accident or false report, let alone the breaking of the plighted word, may detonate its use.

Gas of all types, and 63 different ones were experimented with in the last war, is a projectile, the power of which may at once be gauged by comparing it to bullet and shell.

Thus, from a rifle ten aimed shots can be fired in a minute; from a machine-gun, 600; from a field gun, 20 shells, and if shrapnel is used, then over 7,000 bullets. Gas is, however, composed of molecules, each of which can disable. Therefore the projectiles of a gas bombardment are to be reckoned not by thousands, but by thousands of trillions a minute. In fact, so immense a number that it is not even necessary to know the position of the target; for all that is required is to discover the area it is in, and then inundate it.

Unlike a bullet, the effect of gas does not cease once the force generated to propel it is spent; for whereas the bullet is "dead" the gas molecule is "alive", and may remain so for days after gas has been projected. If the reader can picture a machine-gun which fires billions of bullets a second, each bullet drifting on after the force of the discharge is spent, creeping through trees and into houses, wandering over parapets and into shelters, then he will have some idea of gas as a weapon.

Of the various types used, strange as it may seem, it was not the poisonous gases, such as chlorine and phosgene, which proved the most effective, but instead those which temporarily disabled and generally wounded without killing. These were the tear gases and the vesicant (blistering) group, among which mustard (dichloroethyl sulfide), also called Yellow Cross and Yperite, was the most effective.

The reason for this is that the poisonous gases are far less persistent, they volatilize and disappear rapidly, and as the effect on the body is internal and not external they can readily be neutralized by the anti-gas respirator.

The lachrymators (tear gases), which do no permanent injury to the eyes, are very economical because they can produce an intolerable atmosphere in a concentration one thousand times as dilute as that required for the most effective poison gases. Further, they are highly persistent and, in favourable conditions, their irritating power may endure for several days. Therefore their use compels the soldier to wear his mask indefinitely, and when so shielded his fighting value is reduced almost to zero.

Useful though lachrymators are, the most effective of all gases in the last war was mustard gas, which became known as "the king of gases". It is highly persistent and possesses powerful vesicant properties. Men who come into contact with it suffer severe blistering of the skin, the burns appearing from four to eight hours after first contact. They heal very slowly.

From the day upon which mustard gas was first used—12th July, 1917—it changed the whole aspect of trench warfare. In six weeks at Ypres we suffered over 20,000 casualties. Of it, General Fries, Chief of the U.S.A. Chemical Warfare Service, writes:

"It burns the body inside or out, wherever there is moisture. Eyes, lungs and soft parts of the body are readily attacked. It lingers for two or three days in the warmest weather, while in cold, damp weather it is dangerous for a week or ten days, and in still colder weather may be dangerous for a month or longer whenever the weather warms up sufficiently to volatilize the liquid. It is only slowly destroyed in the earth, making digging around shell-holes dangerous for weeks and months, and in some cases possibly a year or more."

Two other gases deserve a mention—namely, chloropicrin or vomiting gas, and diphenylchloroarsine or sneezing gas, also called Blue Cross. These gases, which were difficult to neutralize by means of the respirators of the last war, as also were toxic smokes, were used to compel the removal of masks in an atmosphere of poison gas.

Though poison gas has been anathematized and interdicted, the casualties suffered between 1915 and 1919 show conclusively that it was far less destructive of life than any of the older projectile weapons. For instance, the medical records of the American Army make clear that, whilst out of every 100 casualties

from all forms of war other than gas more than 25 per cent were fatal, and from two to five per cent resulted in maiming or blinding for life, out of every 100 men gassed less than two per cent died, and very few were permanently injured. Further, that out of the total casualties suffered up to 1st September, 1919—namely 258,338—though 70,752 or 27.4 per cent were due to gas, out of the 45,519 killed only 1,400 are to be debited to gas poisoning. This means that, whereas 24.85 per cent of fatal casualties were caused by bullets and high explosives, only two per cent were caused by gas.

On the whole the Americans were fortunate, for during their two main battles, St. Mihiel and the Meuse-Argonne, the German supply of gas shells had run very low. Had it been normal, it is reckoned that they would have suffered at least 100,000 additional casualties.

According to Beadnell's *An Encyclopædic Dictionary of Science and War*, of the 1,455,000,000 shells fired during the war 66,000,000 were gas shells, and that in all 125,000 tons of gas were used. Also, whereas the total number of gas casualties was 1,296,853, of which 91,198 were fatal, the total due to bullets and shell fire was 28,009,723, of which 8,319,552 were killed or died of wounds.

The following figures are also of interest: Of the 125,000 tons of gas expended, 6,000 was tear gas, 100,000 poison gas, 12,000 mustard gas and 6,500 sneezing gas, etc. The first resulting in no casualties; the second in 876,853; the third in 400,000 and the fourth in 40,000. These figures clearly show the effectiveness of mustard gas over all other chemicals as a casualty-creating agent.

Nor was gas a costly weapon, for out of the American war bill of £6,000,000,000, only £30,000,000 was expended on chemical warfare. Whether this will remain so, should gas be again resorted to, is uncertain, seeing that out of the £17,877,000,000 budgeted for the present fiscal year, as much as £288,000,000 has been provided for chemical warfare.

Cheap or expensive, it is to be hoped that the nations will abide by their pledged word; for were mustard gas to be coupled with air bombing, the effect on the civil population would be truly appalling. We have sufficient horrors already, and, all said and done, so long as the obligation not to use gas as a weapon holds good, it will at least show that honour between men is not altogether extinct—a moral dividend worth many material and physical economies.

25th April, 1944

BOMBARDMENTS OLD AND NEW

"IN siege warfare, as in the open field, it is the gun which plays the chief part. It has effected a complete revolution . . . it is with artillery that war is made."

Thus spoke Napoleon, yet how little could he foresee what this revolution held in store. That a hundred years later, the gun, covering rifle and spade, would bring all field movements to a full stop, and then, in less than a

generation after, in the form of flying artillery, it would not only liquefy nearly every action, but threaten entire nations with liquidation.

Therefore, the point to note, and, tactically, the most important of all, is that the present war, like the last, is pre-eminently an artillery contest. Therefore, that these two wars are closely related, however different they outwardly appear, and therefore, again, that much may be learnt from the one which is applicable to the other.

For instance, though in 1914 the Germans would never have committed the elementary error of employing field artillery in an exposed position without an infantry escort, in 1940 in their attack on Great Britain they sent out hundreds of bombers inadequately escorted by fighter machines. To-day this lesson has been relearnt, for in the bombing attacks on Germany, both by day and night, the number of fighters frequently exceeds the number of bombers.

Here is another example and equally elementary. If there was one lesson the great artillery bombardments of the last war should have taught us, it is that the damage done to the surface of the ground was so extensive as to defeat their object—the rapid occupation of the bombarded position by the infantry. Nevertheless, this lesson had to be relearnt at Cassino, and was relearnt so badly that failure was attributed not so much to the destruction of the ground by bombs and shells, as to the weakness of the attacking infantry! Would greater strength have filled in the shell-holes?—possibly, but it would not have accelerated the pace.

A third example must suffice. It is that the old slogan of the last war, "Artillery conquers, infantry occupies", was largely true, and would have been fully so had it read, "*when* infantry occupies", because conquest depends on the time interval between bombardment and occupation. If short, conquest is rapid; if long, then delayed. This holds as true for air as for surface bombardments, because, should the enemy be given sufficient time between the ending of a bombardment and the attempt to occupy, he is likely to recover. Should he do so, the operation must be abandoned or repeated.

In an air bombardment the main trouble is that a bomb barrage is far less accurate than a shell barrage. This was clearly demonstrated at Cassino, for though the target was in extent one square mile, no less than forty per cent of the 1,400 tons of bombs dropped failed to hit it. With such lack of accuracy it is not practicable for attacking troops to follow a bombardment so closely that they can occupy a position before the enemy can re-man it. Obviously, the solution is that the occupiers must advance vertically instead of horizontally. They must be dropped from the air. Otherwise put, vertical bombardments demand vertical advances.

Though surface artillery can still command greater accuracy than spacial, the range of the latter is so vastly superior that for counter-battery and such-like purposes—the independent duel between gun and gun—the depth of the bombardment area (omitting freak guns) has been extended from a maximum of 20 miles to no less than 2,000, and is daily deepening. This means that this type of fire can now be directed not only against targets within 20 miles, but against any and every surface object in an enemy's country within 2,000—his cities, coalfields, communications, factories, etc. Notwithstanding, this enormous increase in range of striking power can no more conquer on

its own than could the old-fashioned and limited counter-battery fire, because, like that fire, it is purely preparatory.

Therefore, directly it is understood that what is now called "strategic bombing" is nothing other than a hundredfold edition of counter-battery shelling, the fallacy that strategic bombing alone can win a war becomes apparent. Consequently, as it is only preparatory, the materials and labour expended upon it should be in proportion to the materials and labour needed in creating and maintaining the tactical forces; for it is only "when infantry occupies" that "artillery conquers". In other words, the true dividend paid by strategic bombing is not to be reckoned by the damage done, but by the assistance rendered to the occupying forces.

I stress this point because it seems to me that to-day the strategical cart is apt to be placed before the tactical horse. Occupation is the goal, and the game of war cannot be won unless it is scored. No range of striking power can alter this fact. All it can do is to accentuate its verity.

Ends remain constant, means change; therefore, as ends are the more important, we learn most by looking backwards. Fighting is nothing other than giving and avoiding blows. Moral—don't waste them.

27th April, 1944.

LEARN FROM OUR GREAT SOLDIERS

IT is a perverse fact that, though in the past we have seldom lacked able generals, when war is with us our thoughts turn to foreign leadership. Thus, to-day, how often do we hear quoted the names of Napoleon, Clausewitz, Moltke, Foch and others, and how seldom those of Cromwell, Marlborough and Wellington: men who perforce having to fit their genius to our peculiar English temper, can surely teach us more.

It was Cromwell who founded our standing army; Marlborough who first led it against a foreign foe, and Wellington who matched it against the greatest genius of his age, and won.

The first was a fiery-tempered man, full of the wrath of the Old Testament; the second, tactful and courteous, who could suffer fools gladly, and the third, cold and cynical, who could suffer them not at all. Yet each in his turn was called upon to work out of chaos towards some little-imagined cosmos.

Cromwell found himself among "a rabble of raw and poor rascals", Wellington in command of "the scum of the earth", and Marlborough at the head of a small, disciplined army, whose men affectionately called him "Corporal John".

Wellington's method was direct and simple: he lashed his "scum" into soldiers until, as he himself said, they "could go anywhere and do anything". Also he said: "There is but one way to do as I did, to have a hand of iron." Cromwell was very different. "Your troops," he wrote to John Hampden, "are most of them old decayed serving-men and tapsters . . . their troops are gentlemen's sons . . . do you think that the spirits of such base, mean fellows will ever be able to encounter gentlemen. . . . You must get men of

spirit, or else you will be beaten still." In his turn, Marlborough fed and cared for his men—his discipline was based on administration.

All three were typically English, improvisers and creators of invincible armies which, according to the character of their respective leaders, were used as circumstances permitted.

Baxter describes Cromwell as being "naturally of such a vivacity, hilarity and alacrity as another man is when he hath drunken a cup of wine too much". To his Parliament he certainly could talk forcefully, and, when weary of the bickerings of the Rump, striding into the House he dismissed its members with such unparliamentary epithets as "whoremasters", "drunkards" and "corruptors". It was then that he muttered, as his eyes glanced on the mace, "What shall we do with this bauble?"

How different were Marlborough and Wellington, not only when compared to Cromwell, but when brought face to face. Though a deeply religious man, Marlborough did not possess the volcanic faith of Cromwell, and though more imaginative than Wellington, he lacked his integrity. Wellington was an aristocrat to his finger-tips, Marlborough a courtier *cap-à-pie*, and Cromwell an Old Testament prophet dressed in "a plain cloth suit which seemed to have been made by an ill country tailor"—so said Sir Philip Warwick.

It was Cromwell who started the ball of Empire rolling, and, like Marlborough and Wellington, his genius lay in his ability to see into the heart of every question. He saw the events of his day as one event, and not in partitions as did lesser men. So also did Marlborough see the war of the Spanish Succession as a whole, and Wellington the Peninsular War as a vital part of one vast combination.

The common link between them was the moral courage each displayed in breaking away from the conventional and turning circumstances to advantage. Cromwell's grasp of cavalry tactics was profound, for, paradox though it may seem, he realized the essential truth that the first duty of cavalry is not to gallop but instead to learn how to stand still. If at any moment he could halt his horse, even in the middle of a charge, he could turn every circumstance of battle to his favour; if not, then each charge was no more than a one-shot operation. Witness Edgehill, Grantham, Marston Manor and Naseby.

Turning to Marlborough, we find that conditions have changed, highly organized armies meet, the flintlock has replaced the matchlock and the bayonet the pike; besides, John Churchill is a soldier by profession, having seen service under Marshal Turenne. Yet we find the same aggressive spirit; the same desire to push on and bring the enemy to battle.

Like Cromwell, he is also an unconventional general, but more crafty and subtle. He did not believe in what may be called the "strategy of evasion", which consisted in manœuvring rather than fighting, nor in the "tactics of impregnability", which were fashionable in his day. Instead, he returned to the offensive strategy and tactics of Gustavus, of Condé and of Cromwell. Hence, as an unconventional soldier, he was most perturbing to those who followed the doctrines of a highly conventional age.

His masterpiece was the campaign of Blenheim, an outstanding example of English genius in war. The battle itself will repay study, for more present-day tactics are to be learnt from it than from many a modern engagement.

For Wellington, circumstances were vastly different. Not only was he faced by armies which had broken all conventionalities, but armies fired by the genius of the greatest captain since Cæsar.

Nearly always outnumbered in the field, and generally meagrely reinforced, supplied and paid, he has been written down as a defensively-minded general, which, in fact, is an absurd calumny. Wellington knew when to hit and when to guard, and how to hit, and how to guard; therein lay his genius. But, generally, his army was so small and his problem so big that wisely he was cautious, realizing, as he did, that a small army which can be adequately fed is tactically superior to a larger army which is reduced to foraging: in other words, that there is a definite relationship between bread and bullets.

"All the business of war, and indeed all the business of life," he once said, "is to endeavour to find out what you don't know by what you do," and that was what he was always doing. He invariably looked to his supplies, and he never wasted his men, because he mistrusted the future. His long-sighted calculations even outpaced those of Marlborough.

The one common conception between these three men was their power to build on that unchanging foundation—that England is an island. All three grasped the meaning of sea power and its relationship to land power. Under Cromwell, "From the Baltic to the Mediterranean, from Algiers to Teneriffe, from Newfoundland to Jamaica, was heard the English cannon."

On this naval supremacy, founded by Cromwell, all Marlborough's plans were based. In his strategy the Mediterranean coincided with the Danube, with the result that, in 1704, Rooke seized and held Gibraltar, and it has been ours ever since.

On this supremacy, Wellington's campaigns in Spain were also founded, not only because the English fleet commanded the seas, but because he understood how Nelson's victory at Trafalgar could be exploited on land. He looked upon Portugal as no more than a coastal fortress, linked to England by that great flexible road—the sea. To him his army was a projectile fired by the navy, and above all supplied by it; it was in fact its umbilical cord.

Looking back upon what I have written, it seems to me that the key to our genius in war is to be found in the word "dominance". That sense of exclusiveness and superiority which our geographical invulnerability has imbued us with. Dominance of the individual Englishman over foreigners, and dominance of Englishmen in mass over the individual Englishman.

If the individual can by some manner or means—religious fervour, soft words or brutal actions—break away from the dominance of the mass and impose his will upon it, then there can be no doubt that he is a genius. Nevertheless, as the individual is mortal and the mass everlasting, with us the degree of revulsion against the dominance of genius is the surest measure of its greatness.

So they dug up Cromwell, spiked his head on Westminster Hall and his body they tumbled into Tyburn ditch. Marlborough they called a "traitor" and a "thief", and Wellington they hooted on the anniversary of Waterloo and spattered his house with mud.

Surely, this is the hidden reason why so often we turn to foreigners and praise them: deep down in our hearts we know that in no circumstances can they dominate us.

Evening Standard, 3rd May, 1944.

EUROPE IN THE CRUCIBLE

Do our would-be world-planners—those somewhat academic and sometimes not altogether disinterested persons, who to-day are juggling with democratic principles, parliamentary systems, gold standards, the four freedoms, world federation, etc., etc.—realize that this second world war is as great a cataclysm in European history as were the barbarian invasions of the Roman Empire? Clearly the answer is—"no"! For the foundations of all their speculative proposals are crumbling into dust, a dust into which a new spirit is being breathed and out of which a new Europe will emanate.

These people are one-eyed, because they can see only what is taking place on one side of their noses, and scores of millions who are not planning are party to identical occult tricks. To these folk the magic word—the Open Sesame—is "Liberation": the freeing of occupied Europe from German rule.

Yet this is but half the problem, for Europe is already liberating herself. True, not from Nazi hegemony, but from the world conditions which brought National Socialism to life. Blindly, chaotically, magically, in the crucible of war the old Europe is alchemically being transmuted into the new. The very things the planners are planning are dissolving and being compounded into new essences and forms. What the ultimate shape of things will be, no man can as yet see. Nevertheless, we can all look into the furnace and watch the process of dissolution.

It takes two main forms: destruction from the air and devastation on the ground. In the one case the foundations of present-day civilization—namely, towns and cities—are being blasted into dust. In the other, agriculture, the foundation of life itself, is wasted by armies as they surge to and fro, uprooting not only the crops but also the peasantry, who flee before them from region to region. Mass bombings, mass battles, mass deportations and mass migrations are dissolving mass civilization. All is gradually being thrown into the crucible.

In many countries the middle class has nearly ceased to exist. In Germany every great bombing attack sees scores of thousands of people rendered homeless and destitute. They are herded into hutments or are billeted upon strangers, to be fed in communal kitchens. Thus vast numbers of Germans are being de-socialized and proletarianized—that is, reduced to a propertyless herd which, though as yet docile, is, nevertheless, the hotbed of eventual savagery.

The deportation of millions of workers, the dissolution of family life, and above all the masses of refugees, are uprooting society. Thus far, in the main this has been restricted to Eastern Europe, but should a second front be established in the West, the same migrations are to be expected and the same devastating results.

The new and rising middle class is composed of war profiteers and black marketeers. The latter becoming more and more essential to the former as the war lengthens out. Extortion, bribery, cheating and thieving are the

elements of the new morality, consequently the honest and law-abiding go to the wall.

Nevertheless, those thieves and extortioners are not the most powerful element in the new social order; for they are outclassed by the Partisans—the rising aristocracy. They are violent men, men of a new feudal order, whose castles are the forests and the mountains. To them might is unquestioned right. What they want they take. Should the peasants refuse their demands, they are shot. Should they meet them, then they and their villages are subject to enemy reprisals. Therefore, out of sheer self-preservation many of them join the guerilleros, as do also true patriots, the destitute, criminals and the scum. To these bands of strange brothers, cast together by adversity, politics, commerce, finance and the social order itself are governed by the rifle.

As M. Vallé, a French professor and worker in the French underground movement, has recently said: What kind of a future do you expect when young people are trained “to think nothing of killing, killing that resembles assassination more than war . . .”; trained “to forge identity papers, to use false ration books, to lose all sense of traditional decency . . .”? Indeed—what?

That this new middle class of tricksters and this new aristocracy of gunmen hanker after the four freedoms, parliamentary representation, world federation and such-like things . . . impossible! To-day, as with wild animals, their sole *raison d'être* in life is biological existence.

To-morrow what will it be? No man can say, for the crucible is not yet white-hot, nor have its ingredients completely fused together. Yet one thing is all but certain: Europe of to-morrow will in no way resemble the blue-prints of the planners, elaborated in the monastic stillness of their studies, where war is of printer's ink and not of blood, of radio chatter and not of high explosives.

New English Weekly, 4th May, 1944.

OUR GREATEST DANGER

WHEN fumbling with the peace which one day will follow the war, do our statesmen ever ask themselves this question: How came it that out of a small island our ancestors fashioned the greatest empire the world has ever seen? Surely, there must have been wisdom behind their work.

What they saw was this, and if at first dimly, circumstances soon forced it clearly on their gaze: that England is not merely an island, but an island geographically placed to command the sea routes to and from the western flank of Europe. Further, as only the southern shore of that continent lay outside this geographical field, could naval bases be established in the Mediterranean, then, in the event of war, by sea power alone England could shape its course to her advantage.

The strategy which fitted this geographical fact was of a defensive-offensive order. Defensive, in that, so long as command of the sea was held, the home

base was secure against attack. Offensive, because this command guaranteed freedom of movement against any maritime objective within the strategical field.

Once command of the Western Mediterranean was gained, as it was by our occupation of Gibraltar in 1704, our strategy became purely oceanic in contradistinction to continental. Wisely our statesmen based their foreign policy upon it: it was neither aggressive nor isolationist; instead it was self-interested. Its aim was not to guarantee the peace of Europe, but instead to warn the nations that, in face of our naval power, the making of war did not pay.

In all wars fought in accordance with this policy, our oceanic strategy proved this: it does not matter how powerful a continental nation is or how extensive are its conquests, for so long as command of the sea is ours, the initiative remains ours also.

For instance, during the French Revolutionary and Napoleonic Wars, though coalition after coalition fell, because of our sea power the initiative was never lost. So again in 1940, in spite of Dunkirk and the collapse of France, though the greater part of Western Europe was occupied by Germany, because sea power prevented the initiative being wrested from us, the scaffolding of eventual victory stood firm.

Even had Russia and America never entered the war, we could not have been defeated. Further, by naval and air power alone we could have carried on the war until a time arrived when Germany would have agreed to end it on our terms. Why? Because a blockaded Europe is a liability and not an asset.

Terms were actually sought, and as they were rejected by us, in order to break our economic stranglehold, Germany turned first on the Balkans and next on Russia. As was the case with Napoleon, it was the English Channel which pushed Hitler over the Niemen.

The advent of air power, which must now be coupled with sea power, has not altered our position, for at sea the aeroplane is nothing other than a flying ship. The cliché that air power has deprived us of our insular security is absurd. Because, as all can see, the truth is that it has turned us into the biggest aircraft carrier in the world.

Accepting, therefore, that oceanic strategy is to-day as vital to us as it was in the past, I will next turn to continental strategy—the strategy of land powers.

The most important difference is this: whereas sea power is based on freedom of movement, land power is based on bulk of population. Thus, with few exceptions—Macedonia under Alexander the Great is the most remarkable—small nations have seldom established great continental empires. Conversely, and again with few exceptions, great continental nations have seldom become dominant sea powers. The reverse has been the case; for example, Phœnicia, Greece, Carthage, the Vikings, Venice, Genoa, Portugal, Holland and ourselves. Spain and France are possible exceptions, also Japan, for though an island power her population is vast.

The rule, therefore, is that, unlike land power, the strength of sea power does not spring from man-power, instead from strategical position. In 1588, when we faced Spain—incomparably the greatest continental power of the

day—our population was, I believe, in the neighbourhood of 4,000,000. In 1702, when confronted by France, Spain and Bavaria, it was 5,475,000. In the Seven Years War (1756-1763)—our greatest Imperial triumph—it was 6,467,000. And in 1800, when we fought France under Napoleon, it was 8,892,000. All these wars were waged against continental powers whose map-power vastly exceeded our own.

In spite of this, in 1914 we abandoned our oceanic strategy for a strategy of the continental type. Worse still, having all but been bled white in the war that followed, in 1919 we became a guarantor of the peace of Europe, a peace which under no circumstances we could guarantee.

In 1939 we repeated our blunder of 1914 on a vaster scale, for we then placed our land forces under the command of our ally, France, whose strategy was continental. Are we now, once our enemy is defeated, going to repeat our blunder of 1919?

The answer would appear to be "yes", for according to our present policy we, the United States and Russia, a trinity in unity, are going to police and fashion the new Europe. That is, we are to become lock, stock and barrel a continental power.

To test this possibility, all we need do is to examine it demographically. Our population to-day is 47,000,000 and not likely to rise. That of the United States is 130,000,000 and Russia's is 180,000,000 and rising. So far as Europe is concerned, the first of these two countries is not a continental power in any meaning of the words. Indeed, the composition of the trinity is distinctly un-Athanasian.

Demographically our position is untenable, for in man-power we represent but a little more than one-seventh of the total. In population the United States are nearly three times our size, and Russia nearly four times. Therefore we shall play third fiddle.

This is actually what we are doing to-day, because we lack the man-power to play the part of a great continental nation.

After the last war, having assumed the part of a pseudo-continental power, we started out on this suicidal path by appeasing the United States at the Washington Conference, and thereby turned Japan from an ally into a potential enemy. In Europe, abandoned by the United States, on account of our false strategic position, we were compelled to appease one potential enemy after the other, until our name was "mud" and our appeasements were crowned by war.

In this war our false role led us to Dunkirk. Then, having been booted out of the continent, for a brief spell our sea power once again proved dominant. Notwithstanding, no sooner were Russia and the United States in the war, than back we went to our pseudo-continental play-acting. Since when our policy has been one of kow-towing to these great nations.

The upshot, therefore, is, that should this policy of placation be carried into the peace which will follow the war, we shall begin by towing our allies' lines in turn, and end by towing the line of the strongest, until one day it snaps and we are somersaulted into World War No. 3 shrieking appeasements.

This, then, is our greatest danger: once again to become a counterfeit guarantor of peace in Europe; whereas, by reassuming our role as a sea power, we can warn all nations that, when we cross the Rubicon, war does not pay.

Did it pay Philip II ; did it pay Louis XIV ; did it pay Louis XV ; did it pay Napoleon ; did it pay William II, and, in spite of our emaciated and adulterated strategy, will it pay Hitler?

I ask you, therefore, to read, mark and inwardly digest these words :

"England can never be a continental power, and in the attempt she must be ruined. Let her stick to the sovereignty of the seas, and she may send her ambassadors to the courts of Europe and demand what she pleases."

Where and by whom were these words spoken?

They were spoken in St. Helena, and the voice was that of Napoleon Bonaparte, the greatest strategist of any age.

11th May, 1944.

29

THE FUTURE OF GENERALSHIP

WARS are the measure of international differences weighed out in high explosives. And though these differences are many, both in peace and war they are governed by the strategical position of each nation *vis-à-vis* its potential or actual enemies. This position is the key difference which, colouring every other difference, decides the military character of a nation, and, therefore, its type of government. Also, it shapes its generalship in war, which is not to be measured by weight of metal, but by perfection of strategy.

In illustration of this, I will take Germany and ourselves.

Strategically, Germany is a land-locked power—a power surrounded by potential enemies. Such seaboard as she possesses is either boxed up in the Baltic or cramped by our command of the North Sea. Geography has, therefore, destined that to be a great nation she must be a dominant military power. This fact has shaped her course since the calamitous Thirty Years' War opened her eyes to the need for unity.

To-day it may with greater truth be said that Hitler is the spiritual descendant of Wallenstein—the Czech—rather than heir to Frederick the Great—the Prussian. Whereas Wallenstein's dream was the unity of Germany through military force, Hitler's would appear to have been to build a Greater Germany by identical means, in order that the highest possible self-sufficiency in food, raw materials and man-power for war might be gained.

Thus militarism became the king-pin of the German way of life, and because of her geographical position.

Strategically, we are a sea-girt power, a power surrounded by uninhabitable water. Geography has, therefore, destined that to become a great nation we must be a dominant naval power. This fact first began to shape our course when King Alfred, realizing that a sea power cannot be defeated by river and coastal fortifications, built a fleet to hold his own against the Danes.

What was the ultimate result? Not only that we were secured against invasion ; not only that we created the greatest oceanic empire in history, but that, being spared the need for militarism, we became a free people, for militarism is freedom's most deadly foe.

Thus freedom became the king-pin of our way of life, and because of our geographical position.

Further, there is a rider to this problem, and, strategically, an all-important one. It is that, militarily, it was as difficult for us to overrun a continental nation as it was for a continental nation to overrun us. The reason is obvious, it is that the sea is a barrier to extensive military movements.

Up to the year 1914 this rider shaped our strategical policy, and, therefore, also our generalship. However, in 1914, the Channel, becoming a ferry, lured us into the error of abandoning our traditional strategy for a continental one.

Nevertheless, no sooner was war at an end than wisely we disbanded our conscript army; yet, foolishly, by becoming a member of the League of Nations, we adopted a foreign policy which was impotent unless backed by military force. Instead, we should have got back to our traditional policy, which, in 1919, demanded as its implement not only the most powerful navy in the world, but also the most powerful air force.

Unprepared to play the part either of a supreme sea and air power or of a formidable land power, in 1939 our generalship automatically touched rock-bottom. As the Channel was once again a ferry, we stepped on to the continent as a mock continental power, to be rewarded for our folly by Dunkirk; by the German U-boat campaign; by the loss of the command of the Mediterranean, and by the loss of Hong Kong, Singapore, Malaya and Burma. Could we have been so desperately placed, had we entered the war with a small mechanized army, and a fleet and air force second to none in the world?

Now, after nearly five years of war, our generalship is measured, not in terms of strategy, but in weight of metal. Its aims are the pulverization of Europe—our greatest commercial market; the consequent slaughter of friends and foes, and the consequent engendering of hatred against us which will outlast this century. Also, to storm the Channel, now no longer a ferry but a defended moat. These aims have been forced on us because we have muddled up the generalship of the land, which is not ours, with the generalship of the sea—which is.

And, of the future, what do we hear to-day? That once we are through with this war, we solemnly vow never to repeat this foolishness—never a bit. Instead, that the militarism we are fighting, and which we have adopted in order to fight on continental lines, is to become the keystone in the arch of our peace policy.

Having fought German militarism to collapse, all political parties are agreed that we must become a militarized state. For instance, in this year's report of the National Executive of the Labour Party we read: "Strength is essential to safety, and, as we know, there are terrible risks in being weak. It is better to have too much armed force than too little." What kind of force? Clearly one including an immense army, because the allied occupation of Germany and Japan "for a considerable period after the war" is recommended.

Thus we are to step into Hitler's shoes, for he also held that it was better to have too much armed force than too little, and that the solution of his problem was the occupation of the countries surrounding Germany for a considerable time.

In actual fact this change of policy means much more, because between 1933 and 1939 the whole technique of total war was in its infancy, whereas to-day it is striding towards manhood.

In total war, as it is now being developed by science, mobilization becomes extinct. This means that peace itself becomes extinct. After this war the greater nations will have to be prepared to extinguish a war as rapidly as a fire brigade tackles a conflagration. Velocity of striking power is now the dominant principle. Therefore, out of self-preservation all great land powers will not only have to nationalize war, but to place it on a business footing.

This means that they will have to become war corporations, their dividends being the destruction of their enemies in the shortest possible time ; therefore everybody will be on tenterhooks. In its turn this means that the management of the nation must pass into the hands of militarily-minded men, because, if in 1914-18 "war was too serious a matter for generals"—some statesman said so—in 1950 war will be far too serious a matter for unstrategically-minded politicians.

The general-in-chief must not only be a strategist and a tactician, but also a technician, so skilled that he can develop every national war potential to its fullest. He will be the business manager of one enormous death-dealing cartel—the nation.

This looks like military dictatorship on a full-blooded footing. That is exactly what it is ; for once war as a business becomes the social pattern, what room is there for peace except as a drill square? Self-evidently, as war policy must be continuous, no periodically elected government can supply efficient strategical direction.

We cannot have it both ways. We cannot have militarism and freedom combined. They won't mix—one is oil and the other is water.

The sea made us free, and should we wish to remain free, back to the sea we must go. Even were this not true, militarism is no solution, for though as an island power we can muddle into continental wars on a pseudo-continental footing, and, at times, gain continental successes, because the sea is the greatest of all hindrances to the movement of armies, we can never become a great continental power in the full meaning of the words.

Because this is so and has been so from the beginning, though our Empire grew to embrace a fifth of the globe, our naval supremacy never once threatened the liberty or existence of any of the great continental powers. Therefore, it was tolerated. But had it been possible for us to add to it an immense continental army, it would not have been tolerated, and the world would have coalesced against us, as it coalesced against Napoleon and is now coalescing against Hitler. In fact there would never have been a British Empire.

These are questions our Tory, Liberal and Socialist totalitarians might well consider, seeing that a totalitarianized Britain is, strategically, a total farce.

18th May, 1944.

POORER OR RICHER AFTER THE WAR?

TO-DAY, the question which heads this article is in many minds. Nevertheless, before attempting to answer it, let us ask ourselves another: Are we to-day richer or poorer than we were before the war?

Most, I think, will answer: "Richer, by far. For are not we all now at work, and have not wages already increased by some £500,000,000?"

Does money, then, constitute wealth? No, never; for all it represents is purchasing power.

In spite of this vast increase in wages, we are to-day a poorer nation because there are fewer goods for sale. Therefore wages are worth less. Suppose a time comes when there is nothing to buy, what value will your money then be, even should you be as rich as Cræsus? To-day we are in the position of a besieged city—goods are so short that they have to be rationed. Should this siege be prolonged after the war, what value will your savings be? Have you thought of that?

However, this gloomy picture has its silver lining; for, on account of our ever-increasing industrial power, we are to-day potentially vastly richer than we were five years ago. Without a murmur we are spending the greater part of £14,000,000 a day on pure destruction—the war. Think only what it would mean were this sum spent instead on construction. Well, what is there to prevent this, when peace comes? One thing only—money: the very thing which at present we seem to have too much of.

What exactly do we mean by "money"? Over 200 years ago Bisho Berkeley, the philosopher, defined it as "a ticket or counter", the main function of which is to enable goods to be distributed. He is right, for in itself money is not wealth. Wealth in its latent form consists in capacity to produce goods, and in its actual in their use or consumption. This actuality depends upon exchange or distribution, and it is here that money comes in. Therefore, the important thing about money is that there should always be enough in circulation to effect exchange. It does not matter what money is made of, any more than it matters what card counters or railway tickets are made of. To-day, in order to pay for the war, money comes out of the ink pot, and, when its function of exchange has been fulfilled, it should end in the waste-paper basket. But it does not. Instead, it is added to the National Debt; for there is yet another theory as regards tickets.

This is the cult of the Money Power, and to these folk the function of money is to get people and whole nations into debt. Therefore money counters must always be in short supply, so that people are compelled to borrow them. Therefore they must be made of something very rare—gold. The game is then simple enough: Corner the gold and bring the prices of goods and shares to rock-bottom. Next, buy them up at scrap price. Then release gold in order to send prices rocketing, and lastly sell and pocket the boodle.

"The hand that rocks the cradle rules the world?" Not a bit of it; for it is the hand that locks the cash box rules mankind. Deflation of the currency means inflation of debts, and it has been estimated that "the advance of one

per cent in the bank rate costs the wealth-producers of this country at least £500,000 per week"—most of this represents wages.

It is this system of legalized robbery which leads to booms and slumps. It is this system which leads to the struggle for foreign markets, to economic war and finally to war itself. And, be it noted, every great war during the last 250 years has enabled the Money Merchants to gain fabulous wealth and with it ever-increasing political power. How? By first abandoning and then later on by re-establishing the gold or bullion standard.

This is first clearly seen in the French Revolutionary and Napoleonic Wars. In 1793 we went to war with France, and the drain of the precious metals was so great that, in May 1797, an Act was passed authorizing the Bank of England to stop cash payments. Thence onwards the war was successfully run on paper money.

In 1815, when war ended, the National Debt amounted to £816,000,000, of which some £600,000,000 represented paper and credit issued by the Bank of England at no cost to itself other than ink, paper and book-keeping. Instead of it going into the waste-paper basket, in 1821 the Government accepted the recommendations of the Bullion Committee to make this "debt", as to interest and principal, payable in gold. The result: prices fell by about a half, widespread distress followed, and so late as 1839 one person out of every seven was a pauper on the rates.

A hundred years later the identical trick is repeated. In August 1914, with the declaration of war the Bank Act was suspended and the Treasury was authorized to issue currency notes for £1 and 10s., backed solely by the nation's integrity. Of these notes about £500,000,000 were printed, and except for paper and printing they cost the country nothing. The remainder of the money needed for the war, about £6,000,000,000, was issued by the Bank of England, and though it cost the Bank less than the Treasury notes cost the Government, the whole was foisted on to the taxpayers as interest-bearing debt.

If this were not crushing enough, in 1920 Mr. Montagu Norman, Governor of the Bank of England, put up the bank rate, and within twelve months, by knocking prices down by 40 per cent, he put 25 per cent of the workers on to the dole. Meanwhile a Treasury Committee under Lord Cunliffe, following the steps of the Bullion Committee, had been appointed to draw up plans to get back to gold—one of the main objects of the League of Nations. In 1925 its recommendations were accepted. They were to convert the war loans, most of which had been sold when the purchasing power of the pound sterling was less than half its pre-war value, into gold pounds. This hocus-pocus doubled the war debt and the interest payable on it, caused a reduction in wages estimated at more than £1,000,000,000 per annum, and ultimately led to the financial *debâcle* of 1931, when, once again, the gold standard was abandoned.

Readers, you have been warned by these two great wars, therefore keep your eyes skinned on the present one, for once again occult forces are at work; this time with Unitas and Bancors—new names for the old abracadabra. In distant Kentucky, 20,000,000,000 dollars' worth of gold lies buried, and not for nothing. Should this mass of gold, like the Jinn of the Arabian Nights story, be uncorked, after the war you will be damned poor, and, as sure as

night follows day, your children will be herded into the slaughter-house of World War No. 3.

Remember what Lord Bryce said : "Democracy has no more persistent or insidious a foe than the Money Power."

Remember what Mr. Vincent C. Vickers, a Governor of the Bank of England from 1910 to 1919, said in 1939 : "I still believe that the existing [financial] system is actively harmful to the State, creates poverty and unemployment, and is the root cause of war."

Remember what Mr. Arthur Kitson, who fought the Money Merchants for fifty years, said : "The control of money means the control of human life."

And, finally, remember what John Ruskin said : "There is no Wealth but Life."

Readers, history has warned you. Let the Money Power dominate you and you will be as poor as church mice. Break its golden shackles, and though you may not die millionaires, you will have lived happier than Cræsus.

The *Leader*, 20th May, 1944.

31

STRATEGICAL STOCKTAKING

THE rapid worsening of Germany's strategical position is an issue of such political importance that it warrants most careful consideration. How came it about and what does it teach us? These are questions which should interest us as fully as the dramatic events which hourly are unfolding the final crisis. And unless they are correctly answered, it may well be that, from the standpoint of peace, we shall one day find ourselves politically in as difficult a situation as, from the standpoint of war, Germany, strategically, finds herself in at this moment.

In the rise and fall of German military dominion there has been nothing haphazard, for both were preordained from the start. They were not the offspring of good or ill luck, but instead of faulty calculations : the one as disastrous as the other, because in the rise were nurtured the roots of the fall.

Long ago now this was pointed out by Hans Delbrück, probably Germany's most profound military thinker since Clausewitz. Of his theories the most remarkable was that strategy has two main forms—that of annihilation and that of exhaustion. These respectively he called *Niederwerfungsstrategie* and *Ermattungsstrategie*. In the one, battle is the sole aim in war. In the other, it is but one of several means which can attain the political end.

Which strategy should be employed depended on national resources (war potentials) balanced against political probabilities. Thus, in the Franco-Prussian War of 1870-71, because German resources were greater than those of France, and the political probabilities were that the fight would be a straight one uninfluenced by a third party, the strategy of annihilation was remunerative, for it could attain the political goal in the shortest possible time, and, therefore, with the least mutual exhaustion.

Delbrück, however, pointed out that, though this was undoubtedly true, when resources are inadequate the strategy of annihilation is suicidal, and that

Frederick the Great, seeing it in this light, in his day relied instead upon that of exhaustion. Nevertheless, at the opening of World War I, and probably because he failed to grasp the implications of sea power, Delbrück backed annihilation. Then, after the German defeat on the Marne, he returned to exhaustion, and urged that the war aim should be either a negotiated peace or the separation of France and England rather than an attempt to smash them in battle. Also, he strongly opposed the German U-boat campaign, because he feared that it would bring the United States into the war against Germany—which it did.

To reinforce his argument, he took Napoleon as his example, pointing out that his victories instead of gaining decisions only consolidated his enemies. He wrote: "May God forbid that Germany may enter upon the path of Napoleonic policy. . . . Europe stands united in this one conviction: it will never submit to a hegemony enforced upon it by a single power." He argued that Germany's strategical aim was to convince Europe that this was not her intention. In 1917, he wrote: "Fear of German despotism is one of the weightiest facts with which we have to reckon, one of the strongest factors in the enemy's power."

In 1918 he opposed Ludendorff's all-out attack, because resources were palpably insufficient to attain annihilation. Instead, he urged, the aim should have been "to make the enemy so tired that he would be willing to negotiate a peace". Later on, he held that the German High Command lost the war because it disregarded the interrelationship of politics and war. In other words, strategy which fails to embrace the political realities of war can only end in disaster.

Thus far Delbrück, as introduction to what, so far, has been unfolded during the present war, in which the first and last fact is that soldiers seldom earn anything from history. In 1914 Germans misread the Napoleonic wars. They missed their crucial item, which was St. Helena. In 1939 they committed the same error, this time regarding World War I. Its crucial item was Doorn, yet they could not see it. All Napoleon's great battles led to his political annihilation, all William the Second's led to that same end. In both cases the blunder was strategical.

Thus, once again, it has come about that, because Germany had not the resources wherewith to overcome Great Britain, the strategy of annihilation has proved suicidal. Instead, it should have been of the exhaustive type, because strategy could only have been successfully founded on annihilation had Germany possessed the means of crossing the English Channel. Between 1933-40 she prepared for every contingency except one—how to span twenty-odd miles of hostile water.

It would seem that she only realized the full implication of this oversight on her failure to storm Stalingrad. Thence onwards the strategy of exhaustion replaced the strategy of annihilation; but too late, for by then she had exhausted herself. All her great victories have now shown themselves to have been politically disastrous. Simultaneously they bled her white and consolidated the world against her. This is the position she finds herself in to-day.

What can we learn and to our profit from this blundering? That while the Germans were exhausting themselves we were fortifying ourselves, until

the time came when our resources so vastly exceeded her residual strength that we could set out to annihilate her. Hence our aim of "unconditional surrender".

If we have learnt no more than this, we have learnt precious little, because the resources we are now expending and destroying in this struggle of annihilation may be so exhausted in annihilating our enemies that insufficient will remain over wherewith to create the peace—the true object of the war.

In our turn, are not we also failing to relate strategical means to political aims? Are not we becoming over-Napoleonic? For once annihilation becomes an aim in itself it ceases to be rational. War is a means and can never be a positive end. War is negative, peace is positive.

What are the positive aims of the Allied Powers—this is the crucial question? Annihilation of Germany as a military power can be nothing other than a negative object. Should the Allied Powers have no positive aim, or but a shadow of nothing real and substantial, then their victory will be followed by a vacuum and not by a plenitude. As Delbrück wrote: "To come back once more to that fundamental sentence of Clausewitz, no strategical idea can be considered completely without considering the political goal."

For Germany and ourselves the twelfth hour is about to strike. Therefore I would earnestly ask those concerned, in no equivocal terms, to answer the governing question of this as of every other war: "What are we fighting for?" Or, as Marshal Foch was wont to say: "*De quoi s'agit-il?*"

30th June, 1944.

THE WHITE TERROR

THE Red Horror is with us: the White Terror is yet to come. Nevertheless, the latter is beginning to grip us—body, mind and soul. What lies ahead of the blood bath? Is it to be another winding-sheet?

In 1914 we went to war to make the world safe for democracy—so at least we were told. We were promised a land fit for heroes to live in. Yet, what was hatched out of the peace which followed that conflict? Widespread autocracy and devastating distress. In their turn to lead to another war which, at this moment, is striving its utmost to destroy every remaining vestige of humanity, chivalry and decency left in bomb-blasted Christendom.

Is this suicidal sequence to be repeated and yet again until whole nations are massacred and Europe is drowned in their blood? Yes! inevitably yes, unless the poison which dements the nations is vomited forth. What is it?

Before answering this question, let us get down to first principles; otherwise the answer may remain obscure.

The first is that man must eat to live. Food is the essential in his existence. By food he lives, without food he perishes.

The second is that, though the search for food is the end in man's animal life, it is no more than the beginning in his human life, the end of which is, or at least should be, the enjoyment of life and not merely the filling of his belly. With wisdom it has been said, "Man cannot live [a human life] by bread alone."

What does man's true enjoyment consist of? Like his Maker's, in creating. As animal, man rears a family: he is the creator of his children. But, unlike all animals, he is endowed with intellect and moral sense. Therefore he can create both truth and beauty in all their myriad forms.

So long as his life is solely a struggle for existence, he lives in a state of animalism—that is, of war. Only when this struggle is mitigated does peace become possible. Not a white peace which, like a shroud, covers up decay; but a peace green as the grass of the fields and as full of creative power.

Raise these simple principles from man to a community of men—a nation—and what do we see? That the work state is the war state and the leisure state the peace state. All culture arises out of what to the animal-minded appears to be indolence, but is really gestation. Therefore the fullest practical enjoyment rather than the fullest possible employment should be our aim.

How to obtain the fullest enjoyment from life is, therefore, the problem which faces humanity. In fact, it has been so from the beginning of time, and will continue to be so until it is solved. And, until it is solved, the poison will remain, and there will be wars in unending succession.

This enjoyment springs from four freedoms:

- (1) Freedom to eat, so that the nation may live.
- (2) Freedom to mate, so that the race may survive.
- (3) Freedom to think, so that truth may be revealed.
- (4) Freedom to feel, so that humanity may become one.

Should this be accepted, how are we to set about our task? By beginning at the beginning. It seems so simple, yet how seldom is it attempted. We must begin with food, for without it we cannot exist, and so long as we depend on other nations for our food, we are hostages in their hands—at best, opulent beggars.

When we set out to become an industrial country we bartered this freedom for what we thought was wealth. We conquered foreign lands to supply us; we struggled for overseas markets so that with our manufactures we could pay for the food we should have grown. And we evolved a system of finance which would assure us favourable trade balances, which meant deficits or bankruptcy for other nations. Booms, slumps and then wars, such have been our dividends. And not by any means ours solely, but of the world in general.

Foreign trade is the curse of the Industrial Age. Not because in itself it is vicious, but because, through a misunderstanding of first principles, it has been rendered so. Napoleon saw this quite clearly in his day, for he said: "Foreign trade which in its results is infinitely inferior to agriculture, was an object of subordinate importance in my mind. Foreign trade is made for agriculture and home industry, and not the latter for the former."

During the last war, lack of sufficiency of home-grown foods all but brought us to ruin. So, wisely, we went back to the plough; foolishly to abandon it for foreign trade once peace was signed. Thus, once again, war became inevitable, and, however unpalatable it may be, let us at least remember this: the dictators did not create themselves, it was an unbalanced system of world economics which created them. They were the effects of the disease, in themselves they were not the pestilence.

Once the present Red Horror has run its course, are we again going to

repeat this foolishness on a still more gigantic scale? Are we going to shroud up this horror in yet another snowy cerement? It would seem so, for the recently published Government White Paper on Employment Policy (Cmd. 6527) is just such a winding-sheet—it stinks of foreign trade.

No diagnosis of the disease is made in it. No attempt to fathom the causes of war. No attempt to aim at national or international contentedness through leisure. Not a word on the essential importance of maintaining our resuscitated agriculture, and through it regaining our economic freedom—the pedestal upon which all other freedoms stand.

Instead, full employment. Get your noses to the grindstones, my lads. Work! work! work! for the more you toil the less you will think, and the less you think the less you will feel for yourselves and others.

Work for what? To assure you leisure and happiness? Never a bit; for these are the things we are to toil for: To return to pre-war exports is quite insufficient. "We must expand our export trade. An export drive is thus of paramount importance" . . . "To avoid an unfavourable foreign balance, we must export much more than we did before the war." And as all nations, at least all the victorious nations, are likely to be of the same mind, no sooner are their common enemies defeated, than they will turn upon each other in a general scramble for foreign markets. Next, one day, one of them will pull a trigger, and former enemies will become friends and former friends foes—Bedlam!

Read this precious document. It is your duty to do so, for the lives of the next generation depend upon it. Analyse each numbered paragraph and you will find war writ clear in most.

Booms and slumps are accepted as God-begotten blessings and disasters. The Treasury is to concert and co-operate with the banks. The whole rotten financial system is to be maintained in camouflage, and at all costs the Money Power is to be kept in full employment—those select few who create money out of nothing and charge it up to the nation at three per cent.

Lastly, we come to this: "If, however, the policy set forth in this paper is to be successful, the Government of the day must be able to take the tactical decisions for which it calls—and to take them quickly."

Dictatorship of Money in a white paper crown.

The Leader, 8th July, 1944.

WHY GERMANY FAILED

IN 1933 Germany possessed the smallest army of any of the Greater Powers, no air force other than a few secret machines and a navy of little consequence. Yet six years later she challenged Europe, and by the autumn of 1942 her dominion stretched from the Bidasoa to the Volga and from the North Cape to El Alamein. Then the tide turned and defeat dogged her steps, until to-day she is fighting with her back to the wall. How and why has this doom come upon her?

Setting aside the rights and wrongs of the causes which precipitated the

war, this is what Germany attempted to do. To compel Europe to accept her New Order by force, as, in 1919, the victorious powers had compelled her to accept their Old Order by force. Thus the error committed in 1919 was repeated in 1939, and though ultimately, like all fundamental errors, it was destined to lead to disaster, I am of opinion that, at least temporarily, Germany might have succeeded in her aim, had she fully grasped its strategical implications. What were the governing factors :

(1) That though her potential enemies would be ill prepared to meet her, they possessed enormous man-power and industrial resources, which, given time to change over from a peace to a war footing, would vastly exceed her own.

(2) As this man-power and these resources were mainly concentrated in Russia and the U.S.A., it was essential to neutralize these countries. The first she side-tracked by treaty, but as no effort on her part could have won over the U.S.A., it was imperative for her to win the war before the Americans were ready to enter the lists.

(3) This meant that the *whole* of Europe, less Russia, must either be overrun or neutralized in the shortest possible time. And as England was the most ungetatable of all her enemies, her reduction was Germany's key problem.

This problem was half military and half naval, because to get at England demanded not only the conquest of France, but also the crossing of the English Channel.

The land half was worked out with meticulous thoroughness ; but its sea half, so it seems to me, was shelved. In my opinion the German General Staff never really considered it. Instead, they held that the defeat of the B.E.F. in France would cause such a political upheaval in England that, coupled with an intensive U-boat campaign and the threat of air attack, it would drive her out of the war.

Further, it seems to me that, when France collapsed in June 1940, Germany was as much surprised as we were ourselves. So much so that her very success found her in no way prepared to seize the opportunity offered her. Therefore, the air attack she launched on us, and the hasty invasion preparations she made were pure improvisations.

Should this be so, then Blunder No. 1 was not that Germany failed to invade us in the summer of 1940, but that she was in no way prepared to do so. She had considered every problem except this key problem, and what was the upshot? None of the others could be completely solved. This meant that each conquest in turn became a millstone round her neck—a liability instead of an asset.

Strange to relate, this initial error in no way would seem to have opened her eyes to the defeat of her plans in the battle for Britain. The key problem remained. Therefore, if England could not be invaded, the only course left was for Germany to strike at our naval power by depriving our fleet of its sole remaining bridgehead in the West—namely, Egypt—and not in merely continuing the U-boat campaign, which, if prolonged, would inevitably bring the U.S.A. into the war.

The opportunity to strike this blow presented itself directly Italy entered the war. Instead of ordering the Italians to occupy Tunisia and so gain the

shortest sea route to Africa, and instead of sending a powerful German army to Libya to advance on Egypt, the German Command did next to nothing until the following spring. This was Blunder No. 2, for by neglecting to deprive our sea power of its sole remaining overseas base within striking distance of Europe, the key problem grew and grew and in spite of the U-boat campaign.

When, in April 1941, the Germans invaded the Balkans and later on occupied Crete, it appeared to me that their intention was to invade Turkey in order to come down on Palestine and Egypt from the north, whilst the Italians—now reinforced by German forces under General Rommel—pushed into Egypt from the west. Also, when three months later, instead of doing this, Germany suddenly turned on Russia, I could only suppose the reason was that, doubting the faith of her ally, she dared not advance into Turkey with the Russian armies on her flank.

Whereas I was still thinking in terms of the key problem, it would appear that the German Command had set it aside as beyond solution. That as the U.S.A.—already a belligerent all but in name—was likely to join us at any moment, the war would be a long one. Therefore, in order to defeat the blockade, it was imperative to gain the cereal and mineral resources of the Ukraine.

Should this be correct, then the decision to march on Russia carried with it a radical change in German strategy. Thus far it had been offensive—to win the war by battle—now it was to become exhaustive—to defeat the enemy blockade. Instead of its aim being to bring us to heel by military action, it was to gain for Germany such vast resources that she would be able to outstay her enemies even if they were actively supported by the U.S.A., and so eventually force the acceptance of a negotiated peace.

Though my opinion is that this change in the German war aim was premature, and that in any case Egypt should have been settled with first, I will not call it Blunder No. 3, because I have no knowledge of the actual relations between Germany and Russia at the time.

Granted that neither party trusted the other—which seems probable—then, could the Germans smash the Russian armies and advance to the Don and thence northwards via Moscow and Vologda to Lake Onega, they would be in a securer position than if they were to remain on their 1939 frontier, from Memel to the mouth of the Danube with the Russian armies standing intact to the east of it.

To smash the Russian armies did not merely mean defeating them in the field, but above all it demanded the occupation of Moscow and Vologda. Because the former is the hub of all the main railways in Russia proper, and the latter is the southern terminus of the Archangel line. Could the Germans occupy the one, the entire Russian system would be unhinged. Could they occupy the other, Archangel would be virtually blockaded.

Whether the Germans had any intention of advancing on Vologda, I have no idea. But that, in 1941, they intended to occupy Moscow there can be no doubt. That they failed to do so was probably due to errors in psychology and supply. On the one hand, judging Russia's fighting capacity from the Finnish campaign, they held the Russians in contempt. On the other, they

would appear to have miscalculated the appalling wear and tear of the Russian roads, and to have neglected the provision of cross-country transport.

Failing to carry Moscow in 1941, in the summer of 1942 another great campaign was launched, this time from Orel-Kharkov eastwards, with its main weight on Voronezh. At the time it looked as if its aim was to push across the upper Don, swing north and assault Moscow from the south.

Then an amazing thing happened. Voronezh holding firm, suddenly the German attack swung south and swept down the right bank of the Don on Stalingrad, whilst the German right wing, now extended to Taganrog, plunged into Caucasia.

With the U.S.A. now in the war and with vast supplies pouring into Archangel, this race away from Moscow was Blunder No. 3, to be followed immediately by Blunder No. 4—the autumn campaign to take Stalingrad. As this city formed the apex of a tactical salient, the northern flank of which ran along the Don to Voronezh, once that river froze, the German Army assaulting Stalingrad would be in an untenable position. This the German Command refused to recognize until too late, hence the eventual disaster.

Whilst this colossal blunder was being pushed, suddenly the whole aspect of the war was changed: Field-Marshal Rommel was decisively defeated at El Alamein.

Had the German High Command not committed Blunder No. 2—that is, had the importance of Egypt as a pivot of British sea power been recognized and acted upon in 1940 or 1941—there can be no doubt whatsoever that Rommel would have been strongly reinforced, and that, during the summer of 1942, if not before, he would have driven us out of Egypt. Further, had Tunisia been occupied by Italy, once Egypt was in German hands, Algeria, Morocco and Tangier could safely have been overrun, the Strait of Gibraltar blocked and the Mediterranean turned into an Axis lake.

There would have been no El Alamein, no Tunisian campaign, no invasion of Sicily. Not only would Italy have been secured, the Mediterranean closed to us, Malta lost to us and the resources of Africa placed at the disposal of the Axis, but the results of the approaching catastrophe at Stalingrad would largely have been mitigated by our loss of Egypt and the Mediterranean.

The great turning-point in the war is not to be dated from the annihilation of the German Sixth Army at Stalingrad. Instead, from the German failure to cripple our sea power by denying it its sole remaining overseas base—Egypt.

Not only did this failure result in the collapse of Italy but by turning the Mediterranean into an Allied lake, it liberated vast quantities of shipping. In its turn, this assisted in the mastering of the U-boats and the pouring of ever-increasing supplies into Archangel, without which the great Russian offensive could not have been sustained. Further, the regaining of the Mediterranean cleared the way for both the invasion of Italy and France.

These four blunders have placed Germany in her present critical position, which closely resembles that of a beleaguered fortress on a promontory, three sides of which are surrounded by water and one open to the land. Its citadel is Germany herself and its outworks the margins of the occupied countries. These countries, because of their resources, are vital to the citadel.

The garrison of this fortress is no longer strong enough to hold all the

outworks and also sally forth, because they require so many men that it is impossible simultaneously to hold them and build up a striking force. What should its commander do?

From this simple picture it will be seen how perplexing the German problem is. Nevertheless, though the German High Command are now faced by hostile forces beyond their power to smash, it does not necessarily follow that they are yet checkmated, because the use to which forces can be put depends upon the circumstances in which they are placed. What are these circumstances?

Out of several, two are dominant.

The first is that, after three years of desperate fighting, the Russians are more war-worn than their allies. Therefore they are more likely to welcome a speedy termination of the war.

The second is that for the Americans and ourselves the war in Europe is only half the war. Therefore, we also seek its speedy termination, not because we are war-worn, but to obviate our being so when the time comes for us to turn in full on Japan.

To exploit these circumstances, the German High Command must prolong the war, not to win it, but instead, so far as they are able, to modify the peace in Germany's favour.

For instance, if by slowly abandoning the outworks they can prevent the citadel being stormed this year, they may still have force sufficient to hold it well into next year or longer.

By then the liberation of the occupied countries, happenings in the Far East and world events generally may have so modified circumstances that the Allied Powers will be willing to bring the war in Europe to an end on terms less drastic than those of unconditional surrender.

Sunday Pictorial, 9th July, 1944.

THE FLYING BOMB

THOUGH I do not for a moment believe or suggest that the flying bomb or torpedo—for this is what the pilotless aeroplane really is—will in any decisive way influence the course of the war, the ridicule and abuse heaped upon it by the Press is a little disconcerting. It shows a misunderstanding both of morale and the nature of the weapon itself.

Four years ago, when the situation was really critical, it was not the people who lost their heads. Then we appeared to be on the losing side; now we are on the winning. Nevertheless, there would at the moment seem to be fear that we cannot stomach the truth. If the hundreds of thousands of tons of bombs we have rained upon our enemy have not cracked his morale, is it likely that a few hundred tons a day will crack ours?

The Government and the Press would appear to have overlooked this. For long it has been known that a weapon of this kind was in the offing. As *The Times* of 17th June informs us, "The new weapon is simply a development of a well-known invention," and "There is nothing new in the principle of

radio-controlled aircraft." As this is so, then why did not the Government, months back, in an unbiased way explain to the people the powers and limitations of the flying bomb, and so mentally and morally prepare them to meet it?

Instead, they kept their lips sealed. Not a word was uttered until the "monster" arrived, since when it has been so flagrantly belittled that suspicion has been aroused.

For instance, the Parliamentary Under-Secretary for Air is reported to have said: "The new German secret weapon is a most encouraging sign of the growing mental panic of Hitler, Göbbels and the rest." Would he have said so had we used it first? Had it been our invention, would *The Times* have told us that this weapon is: "the last exhibition of venom against the island which has stood between the aggressor and his plans"? Or the *Daily Mail* have called it a "blood-curdling bogey" and have stated, "They are not designed for battle, but are just a coward's last fling." Numbering myself among the common folk, frankly we are not all complete b.fs.

To point out, as one paper has done, that "it is clearly a matter of pure chance if the enemy inflicts any military damage whatever by this form of attack," applies to all projectile weapons. How many men, even on the battlefield, are disabled by aimed shots? Equally platitudinous is: "Such planes are a poor substitute for normal bombing. Every plane launched to attack is inevitably lost." Does this not also apply to every bomb, shell and torpedo? What, however, is not lost are human lives, and be it remembered that the man-hours required to produce a 20-years-old pilot can never be less than 175,080, including leap years.

Here is another gem: "The defect of Hitler as a war-maker is that he is always trying to find a short cut to victory." When the Byzantines found a short cut by means of Greek fire; Mohammed II by means of 30-inch bombardments, and we ourselves by means of tanks, does this also apply? Surely true generalship consists in nosing out short cuts to victory. Why go the traditional way round *à la* Lord Haig?

Further, we are told that this weapon has been introduced because "no German will trust his carcass" in an aeroplane, and that it clearly shows "the Luftwaffe as a bombing weapon has been reduced to impotence". Of course it shows nothing of the kind. Instead, that the Germans are thinking on what, at least to me, appears to be sound lines. This is what I wrote thirteen years ago: "The central problem in future warfare is not even electrification. Instead it is elimination, the elimination of the human element, the historic stumbling-block in war—man fearful and nervous. Mechanization, chemicalization, electrification are but means to an end—the negation of the instinct of self-preservation. . . . The elimination of danger lies at the bottom of all weapon improvement. A bullet is a nerveless bit of metal, so is a shell and so is a torpedo. Yet the fact remains that frequently these weapons are launched on their destructive courses by trembling hands and fearful brains. How much more violent is this trembling in the case of a sword, a spear or a club; for these weapons are literally physical extensions of the soldier's body. The whole history of weapon development is one in which the aim has been to reduce to a minimum this human contact, and its goal would appear to be the Robot obedient to a distant mind."

Picturing these Robots I wrote: "They will be wirelessly directed. . . .

Only direct hits will bring them to earth. Otherwise, soulless, nerveless and without fear, they will move swiftly onwards, and, as their target is reached, without a tremor they will dip and rush upon it. To be attacked by such monsters will be fearful in the extreme. Monsters blind, deaf and dumb. Monsters of steel and high explosives, who can neither curse nor cheer and who nevertheless are the incarnation of destruction."

This is what the flying bomb portends. But, as yet, it is in its experimental cradle, and, like the tank and the aeroplane, will require many years of nursing and schooling before it reaches manhood.

These are the facts which should have been placed before the people. It is not an instrument of venom, or of cowardice, nor is it a blood-curdling boggy. Instead it is a weapon which is likely to revolutionize the next war, but certainly not this one.

To-day its effects may be of no more than nuisance value. Nevertheless, they are worth examining. They are mainly moral, and the chief one appears to be the instinctive dread of a machine divorced from human control; a weapon which cannot be terrorized or become rattled. Such an instrument is uncanny. Man has grown so accustomed to fight man that he is apt to feel impotent when faced by a bloodless and nerveless "creature" which, though it can be destroyed, cannot be killed.

So far, when compared to a full-dress bombing attack, its destructive effects are insignificant. So much so that, to me at least, they hardly warrant the outbursts of anti-aircraft fire they have drawn. From what I myself have experienced, at present it seems to me that this fire is as great a danger to life and limb as the weapon itself. Perhaps this is its still undisclosed secret—to persuade us to kill ourselves in attempting to destroy it.

New English Weekly, 13th July, 1944.

35

THE TERROR OF THE MACHINE

THERE can be little doubt that man has an instinctive awe of the machine he makes. There is physical terror in the snake-like hiss of a circular saw which bids the stranger approach it defensively. A new machine, or one we do not understand, whispers "caution" in our ears, and we touch it doubtfully as if it were some strange animal which might suddenly turn and bite us.

There is yet another kind of fear, and a more insidious one—the dread of mastership of the machine over us. It is an ancient terror, not the fear of being hurt, but the horror of being impotent to resist a stronger force. It is as old as consciousness itself, born of the primitive fear of the lightning and the thunder, the earthquake, the volcano, and the raging sea; those natural forces which understand no reason, and which are deaf to our prayers and supplications. These terrific forces still terrorize the mind of man.

Then man began in his own small way to conquer them, that is to supplement his natural powers by the forces he learnt to harness. The first human being who struck fire from flint, or engendered sparks by rubbing together two dry sticks, was in his day a magician—that is, a man possessed of unknown

and terrible powers. At will he could create miniature volcanoes, and fashion new weapons and destroy old enemies ; a great man and one to be feared.

To-day, with blasting powder we can create earthquakes, and though such are now the commonplace, we are somewhat terrified when we are told to shift a case of dynamite, for we do not handle it as if it were a box of Nestlé's milk.

The reason for this fear—physical and moral—is that the discoveries we make and the machines we build have no reason ; worse, no soul ; they cannot feel, or fear, or sympathize ; they just work blindly, inhumanly, diabolically. To the ignorant every strange machine is possessed of a devil. It is for this reason, I think, that all new inventions are received in a hostile spirit. Gun-powder, steam-power, telescopes, microscopes, locomotives, aircraft, even motor cars, have all in their day met with popular opposition. We are terrified of their possible mastership over us ; they may deprive us of our daily bread, of our work, and even of our liberty, especially so if the machine is a weapon.

This topic is an old one. Centuries before the word "Robot" was invented, Paracelsus, alchemist, scientist, doctor and magician, stooped over strange flasks, beakers and retorts in his laboratory, vainly attempting to fashion soulless human beings called homunculi. And had he succeeded, how panic-stricken he would have been, for the thing would have had no heart or soul in it. It would have been an automaton, looking like a man, yet knowing neither good nor evil. A terrible imp which might do anything, a demon which could be cursed but never really punished. It might have felt pain, but never could it have experienced love or even hatred, it would have been amoral, inhuman—simply an animated fearless thing.

In the popular mind and, therefore, in popular fiction, the mastership of the machine nearly always assumes a Ford car form. Life is simplified, regularized and standardized until human beings are turned into mechanical contrivances—Robots. The workers are assembled in gigantic hives or are relegated to bomb-proof underground factories ; there to live in an eternal shadowland lit by patches of electric light. They toil fearfully and at length grow into human switches and levers. Sucked dry of their souls, like blown eggs, they are the ultimate shells of humanity—completely materialized men and women.

This is not my idea of what the machine will do, or may do. To me it is very different. First, I cannot imagine, anyhow, the British workman living like this. During the last hundred and fifty years the machine has raised him to a position of comfort and luxury never formerly dreamt of by kings. It has been kind to him more often than cruel, yet in its cynical way, if one can use such a term of a soulless thing, it can destroy him, not physically but morally and mentally.

In any great motor car manufactory to-day, the bulk of the workers are automatons, not the mechanized sufferers of our dreams, but the controllers of machines which have so improved upon man's work that he need no longer think. The machine gives him his pay-packet, but its price is the surrender of his intelligence.

A century hence the following may be a picture of the day : A city of little work, of little toil and labour, a perfectly regulated city ; yet a city of utter boredom because the machine will have become so perfect that it all

but works itself, handing over to man so many hours of leisure that he does not know how to spend his long and weary days of indolence.

Such a world would be like lying on a sick-bed though perfectly fit. It would be the life of a healthy prisoner in the narrow cell of a dungeon. To get back to work, to get back to struggle and even to toil, to break this awful spell of indolence would then become the crucial problem of the day. Not the smashing of the machines because they make men sweat, but because they make man yawn. This, I think, is a more likely picture.

I never felt this terror of the machine more strongly and so strangely as when once I visited the great hydro-electric power station at the foot of the falls of Niagara. The water is brought by a canal some thirteen miles in length to a little beyond the falls, from where it is precipitated down ten enormous pipes, each fourteen feet in diameter. Through these it rushes to the turbines of the great generators, which like monstrous cats purr day and night, month and year without ceasing, grinding out a million horse-power.

The water lubricates the machine, and is cut off automatically from the turbines as lights, or furnaces, or power-plants a hundred and more miles away are turned off. It is the nearest approach I have ever seen to perpetual motion.

In that strange temple of machinery, of soulless power and of heartless might, except for the purring of the generators and an occasional spitting of the switches, all was still. There was a boy who worked the lift, there was one man oiling something, otherwise the building was deserted. Then I entered the brains of the machine, a large room full of valves and dials and strange gauges. At the far end of this room was an elderly grey-haired man wearing horn-rimmed spectacles. He was sitting at a table reading a newspaper. He had sat there for twenty years. He was the controller of these million horse-power. Every now and again he would look over his spectacles at the dials; this was his only work, and as I left him he yawned.

The Leader, 5th August, 1944

THE BABES IN THE WOOD

ONCE again the P.B.P. are to play the part of the Babes in the Wood. You remember the story; the wood was called Wayland, but now it has been renamed Bretton, and the wicked uncle—who surely must have been a pawn-broker—is to-day called Uncle Sam, alias Mr. Morgenthau.

Last time this financial pantomime was played was in 1925. Then the wicked uncle was Mr. Montagu Norman, and what did he do? He inveigled the babes into the jungle of the gold standard, and the Bank he represented acquired their inheritance. This so stirred Mr. Churchill that, shortly after the gold standard crashed in 1931, he said:

“But what has happened? We have had no reality, no stability. The price of gold has risen since then by more than 70 per cent. That is as if a 12-inch foot rule had suddenly been stretched to 19 or 20 inches, as if the pound avoirdupois had suddenly become 23 or 24 ounces instead of—how much is

it?—16. Look at what this has meant to everybody who has been compelled to execute their contracts upon this irrationally enhanced scale. . . .

"Is the progress of the human race in this age of almost terrifying expansion to be arbitrarily barred and regulated by fortuitous discoveries of gold mines here and there or by the extent to which we can persuade the existing cornerers and hoarders of gold to put their hoards again into the common stock? Are we to be told that human civilization and society would have been impossible if gold had not happened to be an element in the composition of the globe? . . .

"These are absurdities; but they are becoming dangers and deadly absurdities. . . . I therefore point to this evil and to the search for the methods of remedying it as the first, second and the third of all the problems which should command and rivet our thoughts."

Strange to say, Herr Hitler was thinking on identical lines, and this is how he gave expression to his thoughts: "The community of the nation does not live by the fictitious value of money, but by real production which in its turn gives value to money. This production is the real cover of the currency, and not a bank or a safe full of gold."

But Hitler was a dictator, therefore, unlike Mr. Churchill, it was unnecessary for him to search out new methods. All he had to do was to issue a ukase, when, one, two, three, and to the delight of all German babies "Sound Finance" vanished from the German economic top-hat. How did he do it?

(1) He based money on production instead of gold. If a job wanted doing and men and materials were available, he made money available by creating it.

This horrified the wicked uncles, it was so disgustingly unconventional in peace-time.

(2) Looking upon export trade as a means of securing necessary imports, and not as a happy hunting-ground for Redskin investors, he concluded barter agreements with neighbouring nations.

This sent the wicked uncles into a dither, because barter cut out loans and dividends and commissions on Bills of Exchange.

(3) He put a stop to what is called "freedom of the exchanges"—that is, licence to gamble in currencies and to shift private fortunes from one country to another according to the political situation.

This was really too much; something had to be done to stop this maniac; what if other nations were to copy him?

Then, in 1939, something did happen which upset everything. The P.B.P. of Europe were plunged into World War No. 2. Meanwhile Uncle Sam had collected nine-tenths of the world's gold, and was open to buy any quantity of it at one hundred and sixty-eight shillings the fine ounce.

So far as the Allied babies are concerned, what was the object of the war? Clearly to do down Germany; nevertheless, undaunted by this, quite early in the war Mr. Oscar Hobson, student of finance and economics, openly said: "This is a war for the gold standard." Should he be right, then it would appear that besides doing down Germany we are fighting to perpetuate a system which between 1925 and 1931 gave us slumps, booms, unemployment, slums, means tests and grinding poverty.

Now comes the remarkable corroboration. When it seemed that we were losing the war we heard a lot about the Four Freedoms, but now that we are winning it, all we hear about is the master slave-driver—"Sound Finance".

Hence it has come about that once again the babes have been toddled up the forest glade. And to keep them quiet, on 10th May last, the Chancellor of the Exchequer gave them this lollipop to suck: "I believe there is no foundation for the view that the International Monetary Fund in any way involves a return to the gold standard."

Sucking this goody they entered Bretton Woods.

I have no space here to describe the conjuring tricks performed there—the International Money Fund, the World Bank, the quotas and the voting powers based on them—except to say that one and all overwhelmingly favour Uncle Sam. Therefore I will turn to certain comments which followed the performance:

(1) *The Times*, 24th July: "The Fund and World Bank represent in a new form an attempt to solve the international economic problem in the way in which it was solved during the nineteenth century and in which its solution was sought in vain after the last war. Is this third attempt likely to succeed where the second met with failure?"

(2) *The Economist*, 29th July: "The new proposals are, if not a version of the gold standard, at least based on the same fundamental conception. It would be easier to have faith that faith alone will suffice if there were not so recent a proof to the contrary."

(3) *The New English Weekly*, 20th July: "From this [the Conference] will emerge the only elaborate and detailed design of Peace that we are likely to get before the order to cease fire."

(4) *Lord Keynes to a Press Conference at Bretton Woods*: "He said it would be very 'foolish' to propose 'departure from the gold link . . . no one in his senses would want to make the gold resources of the world useless or throw the gold miners of the world out of employment'."

The lollipop having now dissolved, the babes are beginning to fret. Well they may, for only in a society of angels could Morgenthau's scheme pretend to work: a community in which there is no unemployment, no tariffs, and in which creditors are kindly shepherds and debtors gentle baa-lambs.

Is this the world which looms ahead? Is not it rather a blasted ruin full of disgruntled peoples; full of hate, want, distress and fear—the four horsemen of the approaching Apocalypse?

Here, so it seems to me, is where the wicked uncle has dropped a brick. Having become creditor-in-chief; having placed the *whole* world in debt to his pawnshop, he has created, not a society of moulting angels, but instead of fledgeling devils.

What, once the dog-collar of Sound Finance is buckled round their necks, should they break the lead? What, should the wicked uncle refuse to grant terms which fit their needs and national dignities; may not the pantomime end where it started? May not the babes this time find their way out of the wood by following the trail which Hitler blazed?

What then? Will there be another global Battle of the Gold Standard? Mr. Craven-Ellis, M.P., apparently thinks so; for this is what he wrote in *The Times* of 29th July: "The Monetary Conference . . . is now concluded . . . it can be said that the seeds of World War No. 3 have been well and truly sown in Bretton Woods"—P.B.P.!

6th August, 1944.

THE SECRET OF BLITZKRIEG

WHAT is Blitzkrieg? This may seem an unnecessary question, seeing how often this form of attack has been resorted to. Nevertheless, I much doubt whether even the Germans, who initiated it, really fathomed its full meaning.

It does not merely consist in punching a gap in an enemy's front, and then rushing mechanized forces through it to smash down all opposition. It is something more subtle—namely, to paralyse the enemy's fighting body—his army—by unhinging its brain—its Command and Staff.

This idea flashed through my mind during the British *débâcle* in March 1918. What I saw was this: Tens of thousands of our men pulled back by their panic-stricken Headquarters. I saw Army Headquarters retiring, then Corps, next Divisional and lastly Brigade. This revealed to me the intimate connection between will and action, and that action without will loses all co-ordination. That without a directive brain an army is a mob. Then I realized that were tactics evolved which would enable a small tank army to fulfil this idea, it was possible to fight a battle such as Arbela over again.

What was its secret? It was that, while Alexander the Great's phalanx held the Persian battle-body in clinch, he and his heavy cavalry struck at a weak point, and smashing through, made straight for King Darius—the Persian battle-brain. Once Darius was driven from the field, his army fell to pieces.

On 24th May, 1918, I elaborated this idea into a plan which became known as "Plan 1919". It was accepted by Marshal Foch as the basis of the 1919 offensive, which, on account of the Armistice, never came off.

Twenty years later, with a few modifications, this plan was put into force by the German High Command against the Poles and the French. In Poland its effect was immediate; for within forty-eight hours of the initial attack the Polish G.H.Q. were paralysed, whereupon the body of the Polish Army fell to pieces.

In France a staff officer wrote: "19th May, 15.00 hours. News that the Panzers are in Amiens. This is like some ridiculous nightmare. . . . The French General Staff have been paralysed by this unorthodox war of movement. The fluid conditions prevailing are not dealt with in the text-books and the 1914 brains of the French generals responsible for formulating the plans of the Allied armies are incapable of functioning in this new and astonishing layout."

In the Battle of Tunis the Allied blitz paralysed the German Command. General von Arnim was put to flight, and so were his Corps and Divisional headquarters. Then, writes a correspondent: "Our tanks roared past German airfields, workshops, petrol and ammunition dumps and gun positions. They did not stop to take prisoners—things had gone far beyond that. If a comet had rushed down the road it could hardly have made a greater impression. . . . The German generals gave up giving orders since they were completely out of touch. . . . In a contagion of doubt and fear the German Army turned tail . . . and became a rabble."

And now in Normandy we see the same—the lightning stroke which paralyses the enemy's command. The idea has not changed, though tactics have; for tactics are actions adapted to circumstances, and circumstances are always changing.

Though in 1939 my tactics, as laid down in a small manual on mechanized warfare, written in 1931, still in the main held good, to-day conditions are different. Therefore General Patton put other tactics into force. What I gather he did was this :

(1) Paralyse the garrisons of several short sectors in the German front west of St. Lo by means of 3,000 aircraft.

(2) Under cover of this terrific bombardment, breach the enemy defences and hold the gaps by means of infantry.

(3) Rush armoured and motorized forces through the gaps, the infantry following to collect the prisoners.

We read : " 'Halt for nothing' was the guiding principle for the armoured columns" . . . "Forward patrols [of armour] shot up everything, batteries, headquarters, strong-points" . . . "Disorganization robbed them [the Germans] of both a plan and the means to carry it out."

No other form of attack is so economical as that outlined in "Plan 1919". The aim is not to kill but to paralyse. It is a shot through the brain and not a hacking to pieces of the enemy's body. It is a war of mind more than of muscles, of intellect rather than of high explosives.

It is as youthful to-day as it was in 331 B.C., or in 1520 at Otumba, that amazing battle fought and won by Cortés. Nevertheless, may I warn all would-be imitators : when called upon to emulate the lion, don't forget the fox!—never exactly repeat your tactics.

12th August, 1944.

RIDDLES OF THE WAR

THIS war, like every other, is full of riddles. Why did this happen? How could it have happened? Why did it not happen? Yet, were one to know all the facts, each would be no riddle at all. A miscalculation here, a misjudgment there, a breakdown in supply, a faulty move, lack of some weapon, and above all, a misreading of that imponderable factor—human nature—if known, would answer most. Here, then, are a few I will try to solve.

(1) *Why did the Russians do so badly in Finland in 1939-40?*

Seeing what the Russians have since accomplished, were they bluffing? Were they hiding their strength in order to mislead their more formidable potential enemies?

Nothing so Oriental or astute; for their error was an exceedingly common one: they held the Finns in contempt. They could not imagine that a nation of 3,500,000 people would dare to stand up to one fifty times its size. For Russia, it was going to be a political demonstration, followed by Finland's immediate surrender. A show of force would be sufficient; therefore

administration, strategy and tactics were quite secondary. So it came about that in the depths of winter the Russians advanced into one of the most difficult fighting regions in the world, fully expecting the Finnish workers to rise and welcome them.

Instead, like every virile people whose country is invaded, the Finns rose against the Russians as one man. Not only did they love, but they knew their country, its woods, rivers, mountains and lakes, and on their skis they fought like snow-cavalry. They were here, there and everywhere, and seldom visible. For 101 days—nearly three times as long as France held out against Germany—they kept their enemy at bay. Thus, heroically, they fought for their country, whereas, unprepared for such fighting, the Russians blundered on, to learn the supreme lesson that war is not solely a material affair.

(2) *Why did France collapse in 1940?*

Is this a riddle? Is not the sudden and tragic collapse of France clearly explained by the Maginot Line, lack of tanks and aircraft, and superior German armament? No! Though these things helped in her ruin, alone they do not explain it; for they are of the body and not of the soul. For instance, why could not France have done as well as Finland, as well as Poland, Greece and Yugoslavia, none of whom ceased fighting the common enemy?

The answer is that the French had lost their fighting spirit; they were too comfortable, too bourgeois, too civilized. Their birth-rate was falling as it does in all over-civilized countries; therefore Nature whispered in the hearts of the people, "Safety first, or you will become extinct." Rotten morally, the French were rotten politically and militarily. They wanted to live without fighting. Unwittingly they were treading the path that Rome once trod. Therefore, what could they do when the barbarians—a virile people—descended on them? Nothing, except open their gates and receive them into their fold. Hence Vichy, hence Laval and the rest.

The Maginot Line was but the monument of this decadence, a thing of concrete and steel—the sarcophagus of France within which lay her petrified soul. Over 2,000 years ago the Greek historian Polybius wrote: "Of all the forces which are of influence in war, the spirit of the warrior is the most decisive one." In France that spirit had shrivelled up. Hence her collapse, and hence through crucifixion—let us hope—her resurrection.

(3) *Why did Hitler invade Russia in 1941?*

I have often heard it said: "Hitler must have been mad to turn on Russia; how he must regret it." Probably he does, but was he mad? Look at the situation as it faced him in the summer of 1941.

England he could not get at, and the U.S.A. was already a belligerent in all but name, and was likely to come into the war at any moment. What would Russia then do?—after all, she was a very doubtful ally. In any case it was clear to Hitler that the war was now going to be a long one, and that time was against him because it favoured the blockade. In 1914-18 sea power had strangled Germany, might not it do so again?

Therefore, instead of sitting still, would not it be better, whilst the going was good, to knock Russia out? Not only would Russia's defeat guarantee the security of Germany's eastern flank when the time came to meet England and America in the west, but simultaneously the vast resources of the Ukraine would be gained, and these would enable Germany to withstand the blockade

and so prolong the war that eventually her enemies would accept a negotiated peace?

Were these Hitler's views? I think they must have been. If so, he certainly was not mad. A gambler, yes; but not a maniac. A gambler who lost more through faulty play than by over-daring. Further, it is in no way a disparagement of Russian valour to suggest that, had it not been for British and American sea power which poured supplies into Archangel, Hitler might well have pulled off his gamble. The sea defeated him in 1940, and has done so ever since. This is the answer to many a war riddle besides this one.

(4) *Why did Tobruk collapse like a house of cards?*

This riddle, like so many, is a psychological one, and its answer is to be sought in the moral atmosphere of the moment rather than in lack of physical and material means. The same holds good of the sudden crack-up of the Germans in the battle of Tunis. There, on 6th May, 1943, as one correspondent wrote: "From the moment of our break-through orders had stopped flowing through the German machine. It was like a motor-car engine running out of petrol." In a contagion of doubt German resistance collapsed.

At Tobruk it was the same. When on 13th June, 1942, General Ritchie issued the order to abandon the Gazala Line, the troops holding what remained of it, not realizing the seriousness of the situation, fell back on Tobruk in dismay. Meanwhile, in confusion, all else was speeding eastwards, trumpeting into every ear the clamour of defeat.

In these circumstances, the position of General Klopfer, commanding the fortress of Tobruk, was all but an impossible one. Its perimeter was over 30 miles in extent; its defences were in a bad state, and its garrison—25,000 strong—half fresh and half worn out. Klopfer had no more than 50 tanks and no aircraft. Units were mixed up, communications chaotic, roads jammed with vehicles, and the men tired, hungry and disappointed.

Into this confusion Rommel struck. On the morning of 20th June his bombers swept on to the fortress, whilst his Stukas dived on to the mine-fields, exploding whole strings of mines at a time. Then came his sappers, next his guns and infantry to hold the gap, and lastly his tanks.

Meanwhile Klopfer was bombed out of his headquarters. Next he was bombed out a second time. For hours he lost all control. Thus his garrison was beheaded, to writhe on like a headless body and then collapse.

(5) *Is Rommel really a great general?*

Speaking of Rommel, Mr. Churchill once said: "We have a very daring and skilful opponent against us, and—may I say across the havoc of war?—a great general." Is this true, seeing that Rommel has so often been defeated?

My answer is "yes", because generalship is measured not so much by victories gained as by skill in the employment of means according to circumstances.

Throughout, Rommel's means were inferior to his enemy's, and the circumstances in which he was placed the more difficult. His army was a mixed one, its Italian elements being poor. In aircraft he was throughout vastly inferior and in tanks seldom superior. His line of communications was inordinately long. Further, it was broken by the sea, the command of which was in his enemy's hands.

In his first campaign (April 1941) he advanced 500 miles in thirteen days, and recovered most of what Wavell had won in sixty. Next, on 18th November, though surprised by General Cunningham, he never lost his head; put up a fine fight and carried his army back to his original starting-point—El Agheila. In spite of his losses, in this battle and retreat, on 23rd January, 1942, he struck again, and, as reported at that time, "took his forces right from the Tripolitanian border to the coastal plains of Marmarica almost entirely without air support, and in the teeth of strong, skilful, and sustained R.A.F. action".

On 27th May, he attacked once more, beat Ritchie, stormed Tobruk and drove his enemy back to El Alamein—60 miles west of Alexandria. There, on 23rd October, Montgomery attacked his army, then temporarily under command of General von Stumme—a very indifferent soldier. Towards the end of the battle Rommel came racing back from Germany. Seeing that the battle was lost, he at once ordered a retreat, and carried no inconsiderable portion of his army 1,500 miles back to Tunisia under incessant air attack.

Remembering his means and the circumstances he had to fight in, there can be no shadow of doubt that Mr. Churchill is right—Rommel is a great general.

(6) *The greatest riddle of all.*

Of all war riddles, surely the most difficult to find an answer to is: "Why do nations go to war?" Is it because they cannot help it and take to strife as ducks do to water? Is St. James right when he says: "From whence come wars and fighting among you? Come they not hence, even of your lusts that war in your members?" Or is Herakleitos right in saying: "Men should know that war is general and that justice is strife; all things arise and pass away through strife?" Will this riddle of riddles ever be fully answered? It is the greatest riddle of all.

Autumn Pie, September 1944.

THE BEE IN THE NAZI BONNET

IDEOLOGICALLY, the Allies are fighting the last war over again: a war of destruction, politically as well as militarily so. The obliteration of Hitlerism is their aim, and their means—the annihilation of the German armies. On their part, the Germans, having lost the war militarily, are now experimenting in the technique of the next one; a war of robots and revolutions. Their aim is chaos, and the robot is as yet a minor means of producing it.

The fix the Germans have got themselves into is one of over-extension: they have not the man-power to go on fighting in the conventional way. The difficulty the Allies are getting themselves into is one of over-explosion; in their turn, they have not the foresight to fight unconventionally. Had they, the probabilities are that long ago now they would have overthrown Germany by revolution from within.

Paris is lost; France is lost; all outside Germany is lost—potentially if not actually. Therefore Germany stands alone. True, she has her robots,

but they cannot possibly win her the war. All they can do is to infuriate her enemies, and blind them, even more than they are as yet, to what is in progress in Nazidom.

What is it? In answer, I hazard, the emergence of the Third World War from between the lips of the expiring Second. A war in which revolutions are battles and battles are revolutions.

The Hundred Years' War dissolved into the Wars of the Roses, the Thirty Years' War into the Fronde. May not the like, on a vaster scale, this time be planted on the world as a whole?

Every thinking German knows that the war is lost. Yet they also know, for they are a thoughtful people, that war is only a means to an end—peace, and that peace has not yet been won. Is it still possible for Germany to win it? Not as she would like to have done—as a successful Napoleon; but, shall we say, as an unbeaten Talleyrand?

The German generals cannot see this, Talleyrand is not of their kidney; hence Beck, Paulus and the peace-at-any-price colonels—the men of bayonet-mind. Hitler and his revolutionary entourage, I think, do see it; hence Göbbels's total mobilization. What does it mean? Surely this:

An Allied peace at no price; therefore no Allied peace at all. Otherwise put, no termination of the war by surrender, conditional or unconditional. Instead, first the defence of the walls of the Reich against all-comers. Secondly, when they are stormed, a town-to-town, street-to-street, hill-to-hill and valley-to-valley guerrilla war within the Reich, until Germany is sucked down by the maelstrom of total ruin, which, simultaneously, will engulf with her all her neighbours and draw her victors into such a vortex of chaos that their attempts to shape a new world will end in their fighting each other over their cosmic plans. Then Germany can take sides.

If so, German policy is that of the phoenix, resurrection through incineration: "to be consumed in fire by its own act, and to rise in youthful freshness from its own ashes", as Webster's Dictionary informs us.

Is this policy practical? Clearly the answer is "No!" for that would make it conventional. Instead, it is mystical, and fits well into the Wagnerian ethos—the spirit of Hitlerian Germany. Can it then magically succeed? That depends on the will of the magician. Not only Hitler and his chorus, but the German people as a whole. How far have they been Hitlerized? If totally, then, as Hitler conjured forth his myth from out the chaos of 1919-1932, at least they should be able to conjure forth an equally potent myth from the world chaos they will have created—and myths are spiritually contagious.

We know, however, that all Germans are not Nazis—Beck, Paulus and the bomb-throwing Junkers have proved this. How many are, at this moment, I have no idea.

Before the war and from personal observation in Germany it was clear to me that the bulk of Germans under forty-five were Nazis of varying degrees of fervour, and that the bulk of army officers of over forty-five were not, and with them may be lumped the bulk of the Junkers—the blue-blooded Prussians.

So it seems to me, that on the proportion—whatever it is—depends the success or failure of this phoenix policy.

You can kill Germans with bullets and by killing them end the bullet war. But you can't kill an idea with any amount of lead, and until you have killed

the Nazi myth, you can't win the ideological war so long as your war aim is the extirpation of Hitlerism. This is the bee which I think is now buzzing in the Nazi bonnet. It may be a drone, or it may be a hornet.

4th September, 1944.

40

THE TRIUMPH OF THE MACHINE

"We are greater than the Peoples or the Kings—
Be humble, as you crawl beneath our rods!—
Our touch can alter all created things,
We are everything on earth—except the Gods!"

KIPLING.

ON 22nd June, a Member of Parliament said in the House of Commons: "The world's shipbuilding capacity to-day . . . is sufficient to build, in one year, a mercantile marine of as great a tonnage as the whole mercantile marine of the whole world in pre-war days." And some time before, Sir Robert Fairey, Director-General of the British Aircraft Commission, speaking in Vancouver, said: "Britain could turn out enough planes in three days to last all the world's commercial air lines for five years."

Accepting these statements as substantially correct, then no doubt is left why the war arose; why for three years the Germans triumphed; why to-day they are doomed, and why the fate of Japan is already sealed. The only doubt which remains is—what is going to emerge out of this Volcanalia?

All along the line and in every sub-theatre of the war the Machine has triumphed. And what is its dominant characteristic? With Galileo the answer is: "*Eppur si muove*"—movement is its soul.

It was the Machine which drove the Germans to the North Cape, to Crete, to the Bidassoa and to the Volga. And, to-day, it is the Machine which is driving them back to their frontiers, and which inevitably will crush them into chaos within them.

Wars to-day are won on the drawing-board, in the laboratory, the factory, the forge and in the shipyard. As William James once said: "Battles are only a sort of public verification of mastery gained during the 'peace' intervals." And, it may be added, also in the "peace" areas beyond the battlefields.

To-day the major tactical fact in this "public verification" is velocity. In battles as now fought, unless both sides are exhausted, or a narrow front can be found, you can do only one of two things—advance or retire. *You cannot stand still.*

A year ago the Germans began to talk of "the elastic defensive". Should victory be the aim, then in velocity warfare there is no such thing. There is not even such a thing as the defensive at all. Instead, there is the offensive, which must always be elastic—that is, measured in terms of the maximum power the Machine is capable of developing and no more; for it is not omnipotent.

Had the Germans tumbled to this before the war, they would have prepared

to invade the British Isles. Had they tumbled to it in the winter of 1942-43, they would have turned tail before the Russian counter-attack had developed and have raced back to the Dnieper or beyond. Have collected their forces there, given them a breather, and then, when their enemy came panting up, have lashed out and hit him on the jaw.

In a fist fight without rules, should the more exhausted fighter get into a clinch he is doomed. Instead, he must use his feet, break away, recover his breath, and only then resume the attack.

The Germans did not do this. They clinched and clinched. And now comes the astonishing thing. Having proved the Maginot Line to be a paper partition, they fell back on the Maginot idea in semi-mobile form. They formed "hedgehogs" along their front linked together by weakly held or vacant spaces. Thus their front became a Maginot sieve to Russian land power.

And what was the Atlantic Wall in face of the velocity of Anglo-American sea power? Nothing other than a row of German mouse-traps—a cribble of potential disasters to become a riddle of actual catastrophe.

What could the Germans have done? Again, one thing only: retire, so as to be better placed to spring. Yet, was this possible in face of their enemy's ever-increasing machine power in the air? The answer is doubtful, because air power is war velocity in maximum.

Thus the Machine has triumphed in every field. In Norway, in France and Crete; in Russia, in Africa and now once again in France.

The Machine is lord of the battlefield, because it is master of the forge. Vulcan is the god of this age, and though he may soon sheathe his sword, yet will his hammer go on ringing. Despot of War, is he once again to become Tyrant of Peace?

If to-day, victory can be gained by building the total tonnage of the world's pre-war mercantile marine in one year, and, in three days, aircraft enough to supply the post-war commercial air lines for five years, peace can be lost by this very surfeit of power; for how is it to be consumed once the greed of war is sated? Is the Machine once again to triumph? Or, this time, will Man triumph over the Machine? These are the questions approaching Victory is asking.

11th September, 1944.

GENTLEMEN VERSUS CADS

THE word "gentleman" derives from "gens", a clan. All who live together helpfully and trustfully are gentlemen, men of the clan, and all who cannot are cads. A gentleman is a man of honour, the cad is not. The one has a sense of decency, the other has not; for he is a low, mean fellow, generally a bully, frequently a coward, and always a self-seeker. As this holds good in peace, equally it holds good in war, because war and peace are of the elements of life.

To say, as General Sherman once did, that "War is cruelty and you cannot refine it. . . . War is hell. . . . War is barbarism," though a shallow

apology for frightfulness, is quite untrue ; for whenever gentlemen have been in the ascendant, war *has been* refined. It was so in early classical times, when hero fought hero ; it was so in the medieval age, when to fight clean was at least the ideal of the Christian Knight, and it was so in the eighteenth century, when moral abstractions, such as right and justice, were not mixed with war, because they stirred up the passions of the people and brutalized conflict. As Guglielmo Ferrero has explained :

"Hapless indeed are those belligerents who take up arms in the conviction that they are fighting for justice and right! Both parties being persuaded that they are in the right, they would fight until they were exhausted, and the war would go on for ever! One must go to war admitting that the cause of one's adversary is as just as one's own ; one must take care to do nothing, even for the sake of victory, that may exasperate him, or close his mind to the voice of reason or his heart to the desire for peace ; one must abstain from treacherous and cruel acts, for there is nothing that rouses an adversary to greater fury."

Granted that war, no more so than crime, can be eliminated from human society, surely, then, it is but elementary wisdom to restrict it by mutual agreements and codes of honour, as felony is restricted by laws and punishments? So at least our eighteenth-century ancestors thought and moreover did until the *sans-culotterie* of the French Revolution swept them aside ; since when the cad has become top-dog.

This is a cad's age and this is a cad's war. In fact, there is only one thing really wrong with the world to-day—there are too many cads in it.

Though this has to be accepted ; nevertheless, I am one of those reactionary soldiers who still believe that should you happen to be a gentleman, and should you have to fight a cad, though you should not fight him as if he were a gentleman, you should not cease to be a gentleman whilst you do so.

It may at first appear logical, as it does to cads, that if by fighting a cad like a cad you are able to defeat him the more readily, it is obviously the right thing to do. I do not agree, because, even should you win, you will remain a cad in the eyes of other gentlemen—presuming there are any. And, if there are none, should you lose, it is better to perish honourably than villainously. Our audience, we should never forget, is an eternal one—posterity. And even should there be no gentlemen to-day, there may at least be a few to-morrow. To win or perish like a cad is to blot the eternal.

For instance, the reader may remember Plutarch's story of Camillus and the schoolmaster—a dirty dog who designed to betray the Falerians through their children. We read : "When Camillus had heard him out, he was astounded at the treachery of the act, and, turning to the standers-by, observed that 'war, indeed, is of necessity attended with much injustice and violence'. Certain laws, however, all good men observe even in war itself, nor is victory so great an object as to induce us to incur for its sake obligations for base and impious acts. A great general should rely on his own virtue, and not on other men's vices."

War is cruel, Camillus admits it, but with Sherman he does not admit that it cannot be refined, because he knows that it can be if you behave like a gentleman instead of like a cad.

Here is another example which brings this ancient story up to date.

The newspapers frequently use the word "medieval" as the superlative of barbaric, in order to accentuate how civilized we are to-day. For instance, because Henry V fought in the fifteenth century, *ipso facto*, when compared to, let us say, Air Chief Marshal Sir Arthur Harris, he must be a complete barbarian. Nevertheless, Henry issued the following ordinance to his rough soldiery:

"Also that no maner of man be so hardy to goe into no chamber or lodging wher that any woman lieth in gesem (childbed) her to robbe ne pille of no goodes the wiche longeth unto her refressheing, ne for to make non affray wher through she and her child myght be in any disease or dispere, upon payn that he in suche wise offendeth shall losse all his goodes . . . and himself to be dede but if the King give him his grace."

What does Sir Arthur do? He rains his "block-busters" down on them whilst asleep in bed, whereupon the bishops sing a *Te Deum*. "It will shorten the war," says one; "it will save the lives of our men," says another, as if any soldier who is a gentleman would take out a life policy paid for by the slaughter of the enemy's women and children—not even did the Redskins sink quite so low!

Here is a picture of cad's warfare in top notch:

"The heart of Hamburg was old; it comprised narrow streets and buildings ill-fitted to stand up to our 'block-busters' and incendiaries. During one of our heavy concentrated attacks, about one square mile of the centre of the town was ablaze. Eye-witnesses described how the holocaust was so terrific that the air was sucked into it from outside the perimeter of the fire. Many were suffocated or shrivelled up by the intense heat. Others were drowned in throwing themselves into the canals that run through the city. Days later, when nearby cellars were opened, thousands were found to have perished as though cooked in an oven."

Yet, when in the Thirty Years War Tilly stormed Magdeburg and slaughtered 30,000 people, the barbaric world of that day was filled with horror. Not so England in 1943, we were shortening the war, so the bishops blessed the devilry, and incidentally prolonged it.

As bad as these mass massacres are the acts of individuals. For instance, some time back in the war I came across a photograph of two hilarious airmen, called "Killers", and what was their exploit? Somewhere in France they spotted a passenger train entering a tunnel, so flying low they blew in both of its exits and bottled up the train. Indeed they were killers, but killers of what? Not only French men, women and children, but of all human decency.

Yet how can one blame them when the Government, which presumably is still party to the various Hague Conventions, employs a self-confessed ex-gun-runner to instruct the Home Guard. Listen to Yank Levy, of "mixed Canadian stock", who at one time was employed as a lecturer at the "War Office No. 1 School and elsewhere".

Here is a specimen which might well be framed and hung up in Geneva: "Even if it is impossible to take prisoners, you must capture dispatch-riders and question them before you 'dispatch' them, as silently as possible. . . . If you want to dispatch an enemy quickly, use a dagger or some kind of 'cosh'."

Other useful weapons are "snub-nosed bullets", "hammers, either to smash a man's skull or hit him between the shoulder-blades to stun him;

cheese-cutters—the wires with wooden handles you see in the grocery stores—which are handy for strangling people ; fish-lines, for strangling too . . . and a handkerchief with a fistful of sand in it ; and so on.”

Thus war is waged not only with rifles and guns, tanks and bombers, but also with hammers, coshes, cheese-cutters and fish-lines. In fact, Chicago has now become the seat of Mars. Nevertheless, the question remains, does it really pay? War after all is only a means to an end, and if won by gangsters, then the end will be gangsterdom—a peace of boot-leggers, of high-jackers and of gang brawls. Al Capone will become its hero and Jack the Ripper its high priest. Is this what we are fighting for? War Office School No. 1 answers—“Yes!”

15th September, 1944.

THE WITCHES' CAULDRON

TO correspondents at the front, who can see things as they are, or at least report things invisible as seen, the present stage of the war is simple enough. But to a commentator, should he be an arm-chair strategist, and, contrary to popular belief, strategy is best learnt in so unwarlike a setting or seating, operations are becoming daily more complex.

The one sees the end approaching and is entranced by the drama, the other sees the means developing and is perplexed by their final tests, which will add tone and colour to both the peace and the next war.

Let us look into this witches' cauldron—the Battle of Germany. There among many ingredients we shall behold sea power struggling with land-power, machine-power with man-power, and air-power with will-power. Finally, those of clear sight will see, like a shadow trembling on its steam, the peace or pause which will,

“When the hurly-burly's done,
When the battle's lost and won,”

emerge from its bubblings, also, more dimly still—the next war.

From the beginning Germany was doomed by twenty-odd miles of water—the English Channel. Yet, less than four months back, it was spanned by such an Armada that the 500,000 Germans in France went down before it as if smitten by an avalanche.

What were the secrets of its success? Not that an army was fitted to ships, as the Spaniards were in 1588. But that ships were fitted to an army. The whole operation was devised not as a sea but as a land operation—the storming of a moat. If to-day the Channel can be crossed as easily as once the Red Sea was by the Israelites, then it is probable that in the future the Atlantic and Pacific will also be as easily crossed. What does this mean? Not only that England is no longer an island, but that the United States are no longer immune from land attack. Not because air-power can span water, but because land-power has been taught to swim.

Yet the invasion would have been impossible without air power to protect it, as in a trench attack, by a barrage of bombs. Nevertheless, why should protection take to the air, for in the form of the rocket it can now be based on land? Fifty thousand rocket bombs launched from the Hampshire coast would surely have proved as effective. Why not then from the New Hampshire coast also?

Yet again, without machine power in the form of armoured vehicles, air power, as employed, could have done little more than protect. Had this invasion been launched during the last war, 500,000 men on land would have bottled up 5,000,000 coming from over the sea. Therefore, do not these several things point to one supreme thing, the triumph of mechanized land power, and its still greater triumphs in the future?

In this long-drawn-out battle, which began with the first 1,000-bomber attack on Cologne, the outstanding failure has been the ineffectiveness of the Douhet theory. He saw a whole country put out of action by a single air attack. Even his faithful disciple, Air Chief Marshal Sir Arthur Harris, went so far as to say that if he could send 1,000 bombers a night over Germany, the war would be over in six months; whilst with 20,000 aircraft he would finish it in one night. Yet what have we seen? Well over a million tons of bombs rained upon Germany, yet the morale of her people has not cracked and the will of her soldiers is still unbroken. As an English correspondent wrote from the Moselle front on 17th September: "There is nothing left to them but death: death to as many of their opponents as they can contrive before death overtakes these strange, terrible *automata* themselves."

Not for a moment do I dispute the vast damage done by these miscalled "strategic" bombings—mainly damage to peace. Yet man's whole history centres on his adaptability to danger. For this reason I have held and still hold that the supreme value of aircraft is not as long-range artillery, but instead to gain command of the air, so that armies may be lifted into it to gain command of the land. It is the landing craft problem "verticalized".

This is what we now see in the still moderate airborne landings in Holland. Multiply them tenfold, add to them what we have now learned armour can do on the ground, and fit the whole to landing craft which can carry them over the seas. Fuse these three into a trinity in unity, and you will gain not only a glimpse of what the next war will put to the test, but also, I think, of the peace which will beget it—a peace of "strange, terrible *automata*".

20th September, 1944.

IS EUROPE GOING GUERRILLA?

THE creation of the *Deutscher Volkssturm* is a significant event. Not only does it show that Germany may decide to add guerrilla warfare to regular, but it also completes that system of disorder which our policy of fostering every anti-German movement has established throughout the once occupied countries.

So intent have we been on sowing the anti-German storm that we never

reckoned with having to reap an anti-Allied whirlwind. To-day, the consequence is that, instead of liberation resulting in consolidation against the common enemy, it would seem to be steadily leading to disruption, if not within the main Allied camps, at least in those of their camp followers.

For instance, we read that "Outside a radius of 50 miles from Paris towards the south-south-west the Maquis are masters of a great part of France. It has reduced local representatives of the Central Government to impotence." Further, that the Resistance Movement we have so sedulously fostered is composed of three elements: (1) The F.F.I., "the best behaved and most disciplinéd"; (2) the Franc-tireur Partisans "who are ardent Communists and have no respect for the law", and (3) The International Workers' Movement, "consisting of the worst extremists, many with criminal records".

There is little doubt that in other liberated or semi-liberated countries similar conditions prevail, and in consequence, instead of a united effort being made to end the war, a series of civil wars are in the making.

What has this got to do with the *Volkssturm*? This: should it enable Germany to prolong the war, the longer it lasts the profounder is anarchy in the liberated countries likely to grow, because the most propitious time for the factions to gain their respective ends is whilst Germany still holds the field.

It would seem, therefore, that we are approaching, if we have not already entered, a stage resembling the latter half of the Thirty Years' War. Then faction fought faction for food as much as for doctrine. The result was that the whole of Central Europe was reduced to a desert; half its population perished, and a time came when the bodies of criminals were sold in open market as meat.

It may be urged that such horrors are to-day impossible. Yet it should be remembered that in the age in which they were perpetrated all nations were agriculturally self-sufficient. That now few are, and that in all the problem of feeding is vastly complicated by modern methods of distribution. Once central authority goes, communications soon go, and even if in certain areas food is abundant, unless it can be distributed starvation is a certainty in the less fortunately situated.

This problem of establishing law and order within the liberated countries, though less conspicuous, is in every way as important as the defeating of Germany, because the future of Europe as fully depends on the one as on the other. In fact, the two are complementary, and as it is doubtful whether the first can be solved whilst the second is in progress, I will turn to the *Volkssturm* and examine its potentials.

According to habit we have poured derision on its creation, comic pictures appearing in the Press representing gatherings of grey-beards armed with blunderbusses. Better it would be to look upon it as in 1940 we looked upon our Home Guard. In all such *levées en masse* their initial importance is psychological more than military. They symbolize the will to fight, and only later on, when organization takes form, are they endowed with the power to do so.

How staunch is this will? This is the first question, and it can only be answered by those in touch with actual fighting. Here is what one correspondent has written from Aachen, and as his words are unpleasantly revealing, they are unlikely to be exaggerated:

"There are no signs here of the crack in the German nation we hoped for. . . . Every German I have met is a good patriot and believes implicitly in the Fatherland. . . . Among the Americans here the defence of Aachen has been accepted as typical of the fighting we can expect all the way through Germany."

Therefore it would appear that the *Volkssturm* will not be lacking in spirit. Further, that it will not lack arms, for though "good quality soap", "good quality sweets", "good quality chocolate still wrapped in tinfoil and beautifully printed covers", "clothing probably better than the utility clothing in England", and "masses of radio sets", which another correspondent found in Aachen, are not things to fight with, their existence suggests that the industrial straits Germany is reported to be in have been exaggerated.

Granted a body of several million high-spirited and adequately armed men, ranging in years from sixteen to sixty, how will it be organized in order to prolong the war? Probably on the lines normally adopted by all such formations—namely: (1) Those who work in combination with the regular forces; (2) those who supervise and compel non-co-operation with the enemy on the part of the civil inhabitants and (3) those who operate independently in guerrilla bands or as lone-hand assassins.

Of these three groups, nothing need be said of the first, as it consists of no more than second line regular troops. The second is vitally important, because if it can bring all public services to a standstill once an area is overrun by the enemy, these services have to be reinstated and worked by the invaders. This, from all accounts, is what the F.F.I. did in Paris, with the result that the non-co-operation of transport and railway workers, police, etc., caused the Germans far greater damage than all the street fighting.

The tactics of the third will as always vary according to local conditions. Thus, in the southern half of Germany, which is hilly, thickly wooded and in parts mountainous, guerrillas are likely to work in bands of considerable size; whereas in the northern half, which is flat and more open, faced as they will be by motorized troops, they stand little chance of succeeding in daylight, and therefore the probabilities are that they will restrict their main activities to night.

The problem of how to deal with these guerrillas does not concern me here. Suffice it to say that, in my opinion, the normal method of giving no quarter, shooting hostages and burning villages only accentuates the disease, more especially so should the people be fanatically patriotic. This is what happened during the Peninsular War. The French carried out appalling reprisals, whereupon the *guerrilleros* followed suit, until vast tracts of Spain were so completely devastated that out of self-preservation every peasant who could get hold of a musket joined a guerrilla band.

I do not suggest, because I do not know, nor does anyone else as yet, whether such conditions will dog the steps of the *Volkssturm*. But what I do suggest is that, should anything like this occur, their repercussion on the liberated countries may well be disastrous. In his day the Duke of Wellington once wisely remarked: "I always had a horror of revolutionizing any country for a political object. I always said—if they rise of themselves, well and good, but do not stir them up; it is a fearful responsibility."

Well, we have accepted that responsibility, so now we must make the best

of it. And to my way of thinking, the best is to do our utmost to prevent Europe as well as Germany collapsing into complete confusion. It is all very well for President Roosevelt to say: "We shall not bargain with the Nazi conspirators." Nobody suggests such a course. But should things go from bad to worse, what is far more probable is, that one day we shall either have to bargain with European conspirators, or reconquer Europe, or else write the war off as a bad debt.

10th October, 1944.

44

WHO BOGGED US ON THE RHINE?

WAR marches on! Once again it would appear that we have been mugged in. All was to have been over in September, now November is approaching. Nevertheless, why be despondent? Last November Mr. Mackenzie King, Prime Minister of Canada, told us that the war would probably be over by the following spring, "and might even finish any day now". If a P.M. can miss the target by a year or so, so also can a Foreign Secretary.

The truth is, nobody knows when the war will end, and nobody will know until somebody is prepared to end it. Or it may never really end at all: just fizzle out into a half-war, a quarter-war and so on, until everybody is so fed up with it that its last fraction dissolves into another twenty years' armistice—as last time.

Should this be depressing, the reader must remember that, though he, as fancy takes him, is free to be an optimist or a pessimist, the critic is not so comfortably placed; for he has either to be a sceptic or a humbug. To be a military critic you must know what war is like, and, when you do, what it is like is not necessarily like its reporting. The critic looks for facts, the reporter for writable stories.

Now the first fact in the present campaign is that its initial phase was an astonishing success. The invasion was meticulously prepared; the landings were most skilfully carried out, and, considering the difficulties, the advance was amazingly rapid. Within a few weeks Paris was occupied, and the German armies, from all accounts, were reduced to a rabble.

The second fact is, the tremendous burst that followed. In what seemed no time all Southern and Eastern France was overrun, Belgium occupied and the German frontier crossed. These are some of the head-lines we read at the time:

12th September—"GERMANY INVADED." 14th September—"FIRST GERMAN TOWN FALLS." 15th September—"THE RHINELANDERS ARE ON THE RUN," and then ten days later—"BACK TO CIVVY STREET."

Bar the shouting the war was as good as over; for all that remained was to drive the rabble eastwards to Berlin and decorate that city with Allied flags.

The third fact is, that nothing of the sort has happened. The rabble has disappeared; fanatical fighters have stepped into its shoes; advances are

now by yards instead of miles ; desperate battles rage from Zeeland to Belfort, and everything seems to be bogging down into a 1917 Flanders mud-bath.

Now we are told that the whole trouble is Antwerp. The long haul from Cherbourg and our synthetic port is telling against us. If only in the next week or two, by clearing the Scheldt forts, we can get access to Antwerp, there is a good chance of ending the war this year.

I hope this may be so ; but, as a critic, I can only say : "Get behind me, Mr. Mackenzie King, or whoever it is who is impersonating you."

Of course I agree that we must clear Antwerp, and when it is usable that it will be of the greatest assistance to us. But what I cannot understand is this : Why from the start has not the question of ports received more attention, and why has not their value been impressed upon the public? Had it been, optimism would have been far more balanced.

Again and again in articles which have appeared in this paper I have stressed the importance of sea power. Sea power means free power—power to move anywhere across the waters. Sea power enabled us to land in Normandy, and once there, the first thing we had to do was to gain a port—Cherbourg—in order that sea power could feed land power.

Once we had Cherbourg we could supply our armies. But once they started advancing we wanted more ports, because the farther those armies moved away from Cherbourg the longer grew their communications and the greater became their needs. That we did successfully supply them right up to Paris is one of the outstanding achievements of the war.

At the time I was expecting to see a second invasion, not only to gain further ports, but also to draw as much opposition as possible away from the first invasion. Whether such an operation was ever contemplated I do not know. If it was, then it would seem that the very success of the first invasion cancelled it out.

When Paris fell our armies were still being supplied from Cherbourg, and when the advance east of Paris was made, Cherbourg still remained our sole great port. As this was so, was it wise for General Eisenhower to push on?

I think it was, because his enemy was on the run. If he could keep him on the run, and run him helter-skelter over the Rhine to explode panic in Germany, it is possible that the war might have collapsed in September. It was a great chance, and he seized it.

However, his main obstacle was not the fleeing enemy, it was the tenacity with which the German garrisons of all the French ports from St. Nazaire to Dunkirk held on to them. In the circumstances this must have come as an unpleasant surprise to all thinking soldiers ; but to the reading public those tenacious holdings were written down as a series of colossal enemy blunders—he was always being trapped!

The commander of St. Malo was called "The Mad Colonel", the commander of Brest "The Suicide General", and when after the most terrific pounding the staunch garrison of Calais was pulverized into surrender, my eye caught the following head-line : "SURRENDER OF CALAIS : SLAVE ARMY GIVES UP."

To-day we are beginning to realize that these mad colonels, suicide generals and slave gangs have been no small factor in bogging us down from Zeeland to Belfort. Otherwise, why the cry about Antwerp?

This difficulty of ports, of communications and of supply—the three supreme difficulties which must always face a seaborne invasion—was aggravated by the political warfare waged by the two Allied Governments.

Whereas the object of the generals in the field is physically to beat their enemy, that of the statesmen behind them should be psychologically to attack his government and people—that is, lower their morale and their will to fight.

Instead, what did the Allied Governments and their armies of propagandists do? They un-nozzled their oxygen cylinders and pumped a new life into the expiring Reich. The farther our soldiers advanced from their great port and the more difficult their supply became, the more did these people threaten the enemy with destruction: Bretton Woods and its gold standard; Dumbarton Oaks and its punitive league; Morgenthau and his shears; the Rhineland to France; Brandenburg and Silesia to Poland; East Prussia to Russia; the Ruhr to be internationalized; German industrial power to be annihilated; millions of German workers to be exported for labour; war criminals in unknown numbers to be exterminated, and 70,000,000 Germans crowded into so reduced a country that millions must die of starvation.

This necromancy ruined General Eisenhower's plan. It raised the Devil in Germany. It gave every boy, girl, man and woman something really worth fighting for—their hearths, their homes, their very existence.

Though Eisenhower had proclaimed: "We come as conquerors, but not as oppressors", his masters shouted: "We come as obliterated and as hangmen".

What would we have done had we stood in Germany's place? I wager that we should have done what the Germans are now doing. We should have set our backs to the Rhine and fought like fiends. Was not this how our men died at Arnhem?

Now we are bogged and no wonder. The great plan to drive the Germans over the Rhine has been botched, and Antwerp alone is unlikely to unbotch it, for the Rhine is the toughest obstacle in Western Europe.

It may be divided into five sectors: (1) From Basle to Karlsruhe it is flanked by the Black Forest. (2) From Karlsruhe to Bingen the country bordering it, though more open, is strongly defensible. (3) From Bingen to Bonn it flows through a formidable defile. (4) From Cologne, a little to the north of Bonn, to a few miles south of Wesel, it skirts the Ruhr area—a mass of towns, villages and factories. Lastly, from Wesel to the Dutch frontier it flows through flat, open country.

Except for the last, none of these sectors is easy to cross, and even in the last the breadth of the Rhine makes it a formidable obstacle. When Antwerp becomes usable, it will certainly assist operations in the last two sectors. But is not the true problem now to leave the Rhine alone and get north of it?

Is not this what we attempted to do when we landed our airborne troops at Arnhem? But why—I merely ask this question—was not this operation combined with a seaborne invasion of Friesland? Had we forgotten that sea power is free power—it enables us to land almost anywhere.

And had such an invasion taken place a little before we poured our men out of the skies, would our enemy have been able to concentrate against us as he has done? Would not he have had to meet this new invasion? Would not

he have had to draw every man he could from Southern Holland to do so, and would not this have helped to unlock Antwerp?

These are no more than suggestions, for my knowledge is insufficient to tell me whether at the time they were practical. Yet events tell me this: In spite of the superb start of the campaign, it is fairly obvious now that someone has blundered.

We are bottled up by the Rhine, bunged up and bogged down. Aachen has become a Stalingrad, though unlike Stalingrad it is doomed. But look at the country east of it—the Ruhr. Should all its cities and towns become Stalingrads, then not only Antwerp, but all the ports in France, Belgium and Holland must first be reinstated.

The truth is that a great campaign—the hurling of a broken and disorganized enemy over the Rhine—has been messed up. Not by the soldiers, but by the politicians who ever since Casablanca and its boomerang slogan of Unconditional Surrender have provided more shot and shell for Dr. Göbbel's propaganda magazines than all the bombs and rockets which now have to be rained down on the synthetic Stalingrads their so-called political warfare has created.

On which side are they standing? Are we encircled?

Sunday Pictorial, 22nd October, 1944.

45

MILITARY INVENTIONS

PART I

THIS is an age of inventions: no previous age has been so fertile in mechanical ideas. War to-day is as much a struggle between inventors as between soldiers, in which the technician is challenging the general for first place. This military revolution, the importance of which is as yet unfathomable, I will, so far as space permits, examine in this article, of which the present part is an introduction to the three following.

The essentials in fighting are valour and weapons. Without the one there can be no will to fight, and without the other no power to do so. Every improved weapon by lessening danger increases or decreases the valour of those wielding it. Conversely, to those not so armed, by increasing danger it reduces or exhausts their valour. Thus it comes about that by stimulating fear (loss of valour) danger induces inventiveness.

Throughout the course of history and until the Industrial Revolution forced a change, military inventiveness was of a low order. The reasons are self-evident; as in peace-time the dangers of war are lacking, the soldier rests on his oars, and as in war-time he has to row all out with those he has, there is little time wherein to invent new ones. Nevertheless, when improvements, slow though they may be, are generalized, it will be discovered that in the main their aims have been to increase (1) effective range; (2) striking power; (3) accuracy of aim; (4) volume of fire; and (5) portability or mobility.

Of these aims the first may be called the dominant characteristic. The weapon possessing it is not necessarily the most powerful, the most accurate, the most blow-dealing or the most portable ; instead, it is the weapon which, on account of its superior range, can be brought into action first. In consequence, the side armed with it can first place its enemy in a position of danger, and throughout the fight protect the wielders of weapons of inferior range—that is, reduce the danger they are placed in by like weapons.

Therefore the weapon of superior reach or range should be looked upon as the fulcrum of combined tactics. Thus, should a body of fighters be armed with bows, spears and swords, granted that the bow is an effective weapon, it is around the arrow that tactics should be shaped. If with cannon, muskets and pikes, then around the cannon ; and if with aircraft, artillery and rifles, then around the aeroplane.

Here we pass to the second category of inventiveness, the shaping of an army round the dominant weapon. This is accomplished in three ways. First, by rearranging other weapons in such an order that their powers are enhanced by its powers and vice versa. Secondly, by eliminating weapons which cannot be fitted in ; and thirdly, by introducing new weapons or improved models of existing ones.

Whereas the first category of inventions springs from the imagination, the second is child of ratiocination. Thus, the man who first perceived that, by linking the ends of a bended stick with a twisted gut, he could fashion a weapon—a bow—which would outrange an enemy armed with a javelin, was a man of imagination. In his turn, he who first thought out how to combine bowmen and spearmen in such a way that their united powers would exceed their individual powers was a reasoner. Both revolutionized tactics, he first very slowly until the mechanized arts came to the inventor's assistance, and the second still more slowly, because thinking is abhorrent to the average man.

From time to time in the past, some lone military genius has understood that a new or improved weapon, though always useful in itself, can only attain its maximum effect when existing military organization is remodelled to give it full scope. Thus, so long ago as the fourth century B.C., Philip of Macedon not only invented or introduced a new weapon, a double-length pike—the *Sarissa*—but built around it an entirely new fighting organization, which, when fired by the genius of his son, Alexander the Great, enabled that Great Captain to face any odds and conquer the known world of his day.

Though the Industrial Revolution of the nineteenth century led to the invention of many new weapons; for instance, the percussion-lock musket, the magazine rifle, the machine-gun and rifled breech-loading cannon, it is only during the Technical Revolution of the present century that the immeasurable importance of the second category of inventiveness has become clearly apparent. Yet the one is the complement of the other : the new idea begets the new weapon, which, in turn, begets, or at least should beget, the new organization. This process of development from 1914 onwards I will examine in the remaining three parts of this article.

PART II

Though the weapons of 1914 were very different from those of 1814, military organization remained much as it was at that date. Three fighting arms took the field—namely, cavalry, artillery and infantry. The first was obsolete, and though the second was armed with the dominant weapon, it was looked upon as auxiliary to the third. Had these positions been reversed and had infantry been organized round the machine-gun instead of the rifle, then, had the Germans remodelled their army on these lines, I see no reason why, in 1914, they could not have overrun France nearly as rapidly as they did with a very different army in 1940.

Faulty arrangement of weapon-power, more so than lack of it, endowed the bullet on the defensive with such superiority over the bullet in the attack that, within a few weeks of the war opening, field warfare gave way to siege.

How to reinstate mobility then became the problem, and its solution was sought by reversing the parts played by infantry and artillery. Why did it fail? Because meanwhile the effectiveness of field artillery had been largely reduced by trenches and entanglements—defences which barely existed in the opening phase of the war, and which could not be extensively built until fighting became static.

Next, reliance was placed on volume fire—bombardments of obliteration. They also failed, for though they could always guarantee an initial success, by destroying forward communications they created as formidable an obstacle to infantry movement and supply as the defences they had demolished.

Meanwhile inventiveness was stimulated by failure. This led to the introduction of lethal gas and the tank.

The first may be likened to molecular shrapnel. Its effective range is considerable; the volume of its striking power is complete, and its accuracy of aim is limited only by the direction of the wind. Though these characteristics proclaimed it a dominant weapon, because of the ease by which, except as a vesicant, it was countered, its effectiveness was ephemeral.

The tank, better named land-ship—as it was first called—is a self-propelled, armoured carrier, moving on two endless chain tracks. Its revolutionary characteristic is not to be discovered in its armour, which neutralizes the bullet, but instead in its tracks, which enable it to dispense with roads and in consequence travel across country.

This power of "locomobility"—movement in all directions over negotiable ground—presented the inventor with an all but unlimited field of exploitation. For once he grasped its full implications, the design of a completely new type of army flashed across his mind.

At the time, this vision of the future was seen by a very few. Nevertheless, the progress made during the two years (1916-1918) the tanks saw active service will some day, perhaps, be recognized as one of the most fertile inventive periods in military history.

Had the war continued into 1919, a totally new type of army would have come into existence. It would have been composed of some four to five thousand machines of all sorts: three types of combat tanks; self-propelled armoured guns; self-propelled mortars; armoured infantry carriers; supply

tanks; engineer tanks; bridging tanks; smoke-producing tanks; radio signalling tanks; mine-exploding tanks and salvage (recovery) tanks.

Had this new model army, embracing a vast number of inventions—all suggested by "locomobility"—been maintained by the British Government after the war, and had it been steadily developed and improved upon during the twenty years following it, it would have been totally impossible for the Germans to have overrun France as they did in 1940.

The same organizational inventiveness should have been applied to the aeroplane, which is nothing more than an airship or flying carrier. Its revolutionary characteristic is not that it can be converted into a flying gun using vertical instead of horizontal fire, but that it can carry anything through space up to its maximum load. Therefore a complete army can be fashioned round it, as in 1918 was being fashioned round the tank.

Had this been done, and had the endless track army been wedded to this propeller army, an instrument of such range and striking power would have been created that it would have prohibited Germany going to war. For in the time at her disposal (1933-1939) it would have been impossible for her to have invented and built such an instrument, and without it her fate would have been that suffered by Darius at the hands of Alexander the Great.

PART III

When the twenty years' armistice expired in September 1939, no single army in the world was organized to fight and win a short war—the sole type of war worth winning. Each was in an experimental stage, slowly and blindly groping its way from a muscular basis towards a mechanical one. Of all these armies the German had progressed the farthest, largely because the old Reichswehr of 1914-18 had been wiped out by the peace treaty, and willy-nilly it had to be created *ab-initio*.

What did the German General Staff do? They did the one thing which alone could assure them their many eventual successes. They linked up the tank with the aeroplane, also the infantry, and around these two unions fashioned a new instrument of war. Though, when hostilities opened, it was still in an imperfect experimental stage, with it they overran Poland in eighteen days; occupied all the vital points in Norway in seven; conquered Holland and the greater part of Belgium in five, France in thirty-five, Yugoslavia in twelve, Greece in five and Crete in ten.

For the inventors of future military instruments, in contradistinction to the inventors of future weapons, in this amazing series of campaigns three facts stand out: In no single case did muscular mass play a leading part; in no single case was success attributable to a novel or a single weapon; and in all cases it was the organization of the various arms around the two dominant weapons (carriers) which led to victory.

How came it then that the five great German campaigns in Russia ended in irretrievable disaster?

The answer is twofold: Not only were the Germans confronted by armies as highly motorized and mechanized as their own; but as their armoured divisions contained as many thousands of wheeled vehicles as they did hundreds

of tracked, these divisions were incapable of developing anything like the power they had done in well-roaded France. Lacking cross-country carriers to transport their auxiliary arms and services, and above all to supply them, they were anchored to the indifferent Russian roads, and thereby denied full freedom of movement. In brief, German inventive genius had missed half the problem.

While these great campaigns were being fought, in one of the most favourable experimental grounds in the world, namely, North Africa, through defeat and its consequences—test, trial and error—it was discovered that, in an age of machine warfare, the abutments of tactical organization were the dominant weapons—the aeroplane and the tank. Without the armies we and the Americans created in Egypt, Libya and Algeria, the invasion of Normandy in the summer of 1944 would not have been a practical operation of war. Then the question became : How were these armies to be transported over the sea?

The solution of this problem, which was first considered shortly after the disaster of Dunkirk, and which had reached an advanced experimental stage at the time of the invasions of Algeria, Sicily and Italy, is a perfect example of inventiveness on the grand organizational scale.

What was the problem? Not merely to cross the English Channel, but to cross it on a wide front in deployed fighting order ; land a highly motorized army, its equipment and stores with the utmost speed, and on landing supply it with the utmost rapidity.

In the past the major difficulties were : (1) that there could be no deployment in order of attack, because the vessels used reduced the troops to passenger freight, which could only assume a tactical order *after landing*. (2) Before this change over from a tripper to a fighting footing could be effected, a transshipment from transports to lighters had to be made in order to span the gap between ship and shore—this was the crucial sub-problem. (3) That unless a well-found port was immediately seized, the invading forces could not be adequately supplied. In short, in face of an alert enemy, protected by powerful coastal defences, an overseas invasion was not a practical operation of war.

All these problems were solved by inventions their difficulties suggested. The three outstanding were : (1) The construction of special landing craft which enabled the sea passage to be made in tactical order. (2) The water-proofing of the vehicles—fighting and administrative—in such a way that, under their own power, they could span the gap between landing craft and shore. (3) The prefabrication of a transportable port of disembarkation.

By these three inventions, each suggested by the analysis of the problem, under cover of the dominant arm—the aeroplane as flying gun and carrier—the problem was not only solved as if by magic, but its solution has revolutionized naval strategy, for it has bereft a maritime power of at least half its shield.

PART IV

Looking back on the problem of inventiveness, two points clearly stand out. The first is, that whereas in former days, when the simplicity of army organization may be likened to the handicraft period in industry, the invention

of a new and powerful weapon frequently led to decisive results. The second is that, to-day, when army organization is progressively catching up with industrial machine-craft, the decisive effect of such inventions is becoming more and more circumscribed.

At the opening of the present war, it may still be said that the then recently discovered processes of radio-location did have a decisive effect on the air defence of Great Britain. Yet, towards its close, so novel a weapon as the flying-bomb, and in spite of its effective range, had none, because time was insufficient wherein to build around it a highly organized machine tool. In itself it was but another projectile.

Therefore the conclusion is that, to attain their maximum utility, inventions should be suggested by the problems of war, not as they arise but by their being foreseen. In other words, through prolonged contemplation, and not, as has normally been the case, by sudden inspiration. Though this does not mean that intuitive flashes, such as the vision of the use of gunpowder as a projectile propellant, or of fulminate of mercury as a cartridge detonator have lost their values; it does suggest that the problems of war, rather than some sudden inspiration, should fructify them.

This means that as each major war problem can more readily and economically be solved by an instrument specially built to solve it, the day of general-purposes armies is drawing to a close. Such organizations are static and consequently conservative, and in a progressive scientific age are generally completely out of date when most needed. They are Jacks of all trades and masters of none, and are terrified by novelties because they upset their inertia.

To create a special-purposes army first demands a new type of General Staff, an organ which, like the management of any great business, is not only concerned with maintenance and discipline, but above all with service, and to serve it must keep up to date in all its departments. A separate section of this Staff should deal with each special problem, constantly reviewing it in the light of scientific and industrial progress, and as constantly turning over to inventors the specifications of weapons and means it wants invented.

Had such an analytic war brain existed in Great Britain in 1919, the embryonic mechanized army then in formation would not have been scrapped, and had it not been, as I have pointed out, the probabilities are that the whole course of the war would have been changed.

Had Germany, before 1939, been in possession of such an organ, would not it have been seen that, at bottom, the conquest of Europe was not a land but a sea problem? For conquest could never be complete until the English Channel was successfully stormed. Therefore, that to go to war before an instrument had been invented which could storm the Channel was to gamble with Fate. As, in advance, such an instrument was not devised, England remained unconquered, with the result that each Continental nation Germany overran became a liability instead of an asset to her.

Again, had the Germans possessed the type of General Staff I have in mind, would not it have immediately seen that in so vast and ill-roaded a country as Russia, the crucial problem was cross-country supply, and that, until it was solved, the larger the armoured forces put into the field the more road-bound they must become?

In these three cases, and others with ease could be added, the key to

inventiveness is range of action governed by the dominant weapons, those of most effective range—the aeroplane and the tank. This suggests that, in the immediate future, armies will be divided into two co-operative grand divisions: a corps of the air and a corps of the land, the latter representing the stable tactical element and the former the mobile, which every fighting instrument should possess, and which the human body, the prototype of all such instruments, does in its skeleton and muscles.

It would, therefore, seem that when inventiveness is placed on a scientific footing, as it is to-day in all great industries, a time will come when only those nations which possess vast war potentials and are able to develop them for war will be in a position to create and maintain these completely industrialized fighting forces. If so, then all those nations which cannot do so will be forced out of the running, until a time may come when through inventiveness one great power will be in the position either to compel world peace, or, like Alexander the Great, conquer the world of its day—this time, not the Empire of Darius but the entire globe.

20th November, 1944.

46

THE WAR ROCKET

PART I—ITS PAST

THOUGH religious, æsthetic and other ideals have given culture to man, what we call “civilization”—our way of living—has in the main been fostered by discovery and invention. Thus, step by step, one invention or discovery after the other—fire through friction, the bow, the wheel, the sail, smelting, forging, the use of gunpowder, of steam, of oil and of electricity—have led man from one phase of civilization into another. Yet it is war rather than peace which fructifies so many of these discoveries. So often is this the case, it would seem that Providence has decreed that man’s creative endeavours can only be rapidly brought to fruition by calling in his destructive propensities.

Until a few months ago, the latest example of this was the aeroplane. No sooner was it born than it was baptized in blood, and during the four years of the last war it was brought to a state of perfection which forty years of peaceful endeavour would have been hard put to rival. Now its hegemony is challenged by the flying-bomb and rocket.

The first is propelled by jet propulsion—pressure of exhaust gases on the atmosphere—a very old idea, for Heron’s æolipile, the first known steam engine, invented about 150 B.C., was worked on this principle. Strange, also, the first steamship ever built was probably James Rumsey’s. He was a Virginian who, in 1775, carried out trials on the Potomac with a small boat fitted with water-jet propulsion. It was worked by a steam pump which sucked in water at the bow and threw it out at the stern.

The second—the rocket—works very differently, as I will explain in the second part of this article. They are supposed to have been first used by the Chinese against the Tartars in 1232. In the West they are heard of as weapons

in 1380. Nevertheless, it was not until the end of the eighteenth century that they began to grow formidable. In India, in 1783, Tipu Sultan scattered the Mahratta horse by rocket fire, and, in 1799, at the siege of Seringapatam, his rockets proved so effective that the British Ordnance Office took up their construction. In 1804, this led to Colonel Sir William Congreve, a British gunnery specialist, designing a war rocket, which two years later was tested out during the bombardment of Boulogne. Congreve informs us that "in less than ten minutes after the first discharge the town was discovered to be on fire."

Rockets were again used with considerable effect at Walcheren and Copenhagen in 1807, and at the battles of Leipzig (1913), Waterloo (1815) and New Orleans (1815). In the last, writes Major A. Lecarri re Latour, "a cloud of rockets continued to fall in showers during the whole attack."

Congreve tells us that he made rockets of from two ounces—"a species of self-motive musket ball"—to three hundredweights, and that larger could be constructed. Eventually four types were adopted by the British Army, a 3-, 6-, 12- and 24-pounder. They were made of sheet steel with a bursting charge in their heads. They had a range of from 1,000 to 3,500 yards, and were fired from a rocket tube mounted on a tripod. Of this weapon Congreve wrote: "The rocket is, in truth, an arm by which the whole system of military tactics is destined to be changed." A prophecy which, as I shall show, is likely to be fulfilled.

Nearly all European armies adopted the Congreve rocket, to abandon it about the middle of the last century. We were the last to do so in 1885.

However, the rocket, as a weapon, was only in eclipse; for no sooner was the First World War ended than three men in particular, Dr. Robert H. Goddard, an American; Professor Hermann Oberth, a German, and Robert Esnault-Pelterie, a Frenchman, started experimenting with it. Germany soon became the home of rocketry. Tests were carried out with motor cars, gliders and aeroplanes, but the ultimate aim behind all these trials was to solve the problem of inter-planetary flight. Though this may seem fantastic, theoretically it is by no means so. Anyhow, those concerned had such faith in their project that they went so far as to draw up full plans for a transatlantic passenger-carrying rocket-ship, which by travelling through the stratosphere would cover the distance from Berlin to New York in a little under one hour. Then, apparently, in 1933, the Reichswehr Ministry stepped in and all stratospheric rocket experiments were taken over by its Ballistic Department.

Two years later, in a book on rocketry, the following sentence caught my eye: "German scientists are busily engaged in seeking a means of destroying cities hundreds of miles away by means of stratospheric rockets." I thought of Congreve and wondered whether his prophecy was about to come true.

PART II—ITS PRESENT AND FUTURE

When on 19th September, 1939, Hitler broadcast that he had a secret weapon, I wrote an article suggesting that it was the rocket. I did so, not only because I knew that the Germans had been experimenting with rockets, but because I realized that, as a projectile, the rocket, potentially, was vastly

superior to either the shell or the bomb ; for, as it is self-propelled, it needs neither cannon to fire it nor aeroplane to carry it. Theoretically, its size is unlimited, its speed fantastic and its range is global. Further, its power is enormous ; already, long before the war, a 14-lb. rocket motor had been built which developed 200 horse-power! Lastly, its construction is simple, consisting of three main parts—a warhead, fuel tanks and a combustion chamber.

Unlike a shell it needs no explosive force behind it, and unlike the flying-bomb no atmosphere against which to push. In fact it attains its highest efficiency when moving in a vacuum. This was Ziolkowsky's great discovery in 1903, the year the first aeroplane flew.

The reason is that it acts by reaction in accordance with Newton's third law of motion—"To every action there is an equal and contrary reaction." This may be explained as follows : Place a machine-gun on a frozen lake. Fire one round and the gun will jump back a certain distance. Next, fire a succession of rounds, so that the recoil of each shot fired boosts on the recoil of the last shot fired ; then, in a few seconds, recoil accelerating recoil will send the gun racing backwards over the ice. Lastly, imagine all friction with the ice removed, and you have a simple picture of how a rocket works.

Between the earth's surface and pure space there are three main layers of atmosphere : the Troposphere (breathable air) ; the Stratosphere (mainly nitrogen) and the Ionosphere (mainly hydrogen). They are respectively about seven, fifty and one hundred and fifty miles deep.

In them, speed, on account of heating—not due to the density of the atmosphere, but to what is called "adibatic compression"—is limited to 4,500 miles per hour. But in pure space there is no such limit. It has been calculated that a rocket fired from Berlin to New York would cover the journey in less than fifteen minutes ; would reach a height of over 600 miles above sea level, and attain a maximum speed of about 9,000 miles per hour. Therefore, during the final 200 miles or so of its flight some retarding apparatus would have to be brought into play to prevent it being compressed into incandescence.

To bring the rocket to perfection two main difficulties have to be overcome ; the first is fuel and the second—control. At present the Germans favour a mixture of liquid oxygen and petrol, which gives a maximum velocity of 9,000 miles per hour. This fuel is, however, bulky and unreliable. Could atomic energy be tapped, the problem would be solved. For instance, it has been estimated that in 1,700 years one ounce of radium gives off 1,720,000,000,000 horse-power-seconds. Could this slow radiation be accelerated, the first difficulty would be well on the way to solution.

The second is more tangible. It might be overcome gyroscopically as in the flying-bomb—or by ultra-short wireless waves, or by light waves. Further, a small transmitting apparatus might be fitted to the rocket, which would tell the sender its exact position throughout its journey.

To-day the rocket has become so formidable that it is challenging the shell and the bomb. For instance, we have the American Bazooka rocket tank-buster, the Russian Katyusha—a multiple rocket-thrower—and the German Nebelswerfer, a somewhat similar weapon. Also we have the air-carried rocket as used by British Typhoon planes. All these weapons have come into use because the cannon can be dispensed with. To fire a four-inch shell from a

fighter plane is not a practical proposition, but to fire groups of four-inch rockets is.

Development is forging ahead. London has been bombed with rockets at a range of 200 miles, the trajectory of the rocket reaching an altitude of 70 miles. Therefore the stratosphere had been surmounted.

Yet, in my opinion, the most portentous development is the use of rockets to propel gliders and aeroplanes. If these small vessels can be motored by rockets, in time larger ones will certainly be. Before the present century has run its course, there is nothing fantastic in suggesting that complete armies will be whisked through pure space a thousand miles above the earth's surface, to speed at thousands of miles per hour towards their enemy.

Therefore, well may we ask ourselves, were those first rocketeers so wrong when years ago they set out to plan a transatlantic rocket ship as the first step towards the conquest of Venus and Mars? Did not one write: "The rocket denotes a unique method of propulsion which bids fair not only to change the face of this world, but the face of other worlds"? We live in extraordinary times—in days of strange and violent possibilities.

13th December, 1944.

47

THE FOUNDATIONS OF VICTORY

"WE will win the European War in 1944", so said General Eisenhower on 28th December, 1943. More cautiously, five days later I wrote in this paper: "We can win the war this year if we seek a reasonable end and if we combine all our means to win it." Then I added:

"Possibly we may win it if we do not, but with this difference: In the one case we shall win a controllable Europe, in the other a continent sunk into chaos and blazing with anarchy."

We did not win it, and to-day Europe shows signs of approaching dissolution. It is no good pretending that this not so, for it is so. Everywhere we look we see disorder brewing.

We did not win it because our end was not a reasonable one, and because we failed to bring all our means into play.

We forgot or refused to see that war is a political act in which military force is no more than one of its instruments. Peace is the end, force—the means.

Even now, so little does this appear to be appreciated that, as an introduction to 1945, I cannot do better than repeat some of the things I wrote twelve months ago.

"We hear much talk of softening the enemy by bombings and blastings. Yet the fact remains that the most certain process is not terrorization, but political action.

"Should, however, external pressure alone be exerted, then I see no certainty why this year (1944) should bring with it a decision.

"It is the political sphere that we have bungled this time. With our slogan of 'Unconditional Surrender', our perpetual harping on war criminals

and our threat to cut Germany into ribbons, we have made any form of peace for Germany appear worse than war itself.

"We must concentrate on two things, external and internal attack. The one means the Second Front, the other the Internal Front."

I next pointed out that geography had clearly fixed where the first of these two fronts should be—namely, between Cherbourg and Ostend. Then I continued :

"Therefore, while the physical struggle is at its height, our political attack should be pushed and pushed in order to sap the spirit of the German warrior. Not to force him to go on fighting to 'avoid a punishment worse than death', but to inculcate within him the feeling that surrender is preferable to annihilation.

"Here, then, is where our weakness lies. We have offered our enemy no alternative to fighting except annihilation. We have not even offered the nations he has subdued an aim they can grasp and understand, for liberty in itself is largely an empty word.

"If we now remedy this . . . and unroll before the eyes of a yearning world a realizable and concrete New Order, then, coupled with the might of our external assault, the last act of this grim tragedy will be played in 1944."

Since these words were written, no one can say that the Allied sailors, soldiers and airmen have not carried out their job on the external front, and done it magnificently. A glance at the war map as it was at the opening of the year and as it is now at its end is proof positive of their unstinting valour.

Then the Russians were fighting at Vitebsk, Zhitomir and Nikopol, and were still distant from the 1939 Polish frontier. Now they are fighting in East Prussia and Hungary, have driven Finland, Rumania and Bulgaria out of the war and have compelled the Germans to abandon Yugoslavia and Greece.

Then the Allied front in Italy ran from Ortona on the Adriatic to the mouth of the Garigliano river, 80 miles south of Rome. Now that front has been advanced 300 miles to near Bologna and beyond Ravenna.

Then there was no Second Front in Europe. Now that front stands on the Rhine, and nearly all Belgium, practically all France and nearly half of Holland have been reconquered.

Then our armies in Burma were still skirmishing on the Indian Frontier around Tiddim and in Arakan. Now they are rapidly advancing on Mandalay.

Then the Americans were fighting in the outer line of the Japanese defences—New Guinea, the Gilbert and the Marshall Islands. Now that line has all but ceased to exist, and the inner line has been breached by the invasion of the islands of Leyte and Mindoro, two of the Philippine group and the latter less than 100 miles from Manila—and Tokyo is being attacked from the air.

All this has been accomplished in twelve months. Yet the question remains, is this to be purely a soldier's war, a war of destruction, for the soldier is a breaker-down? Or is it to be a statesman's war, a war of construction, for the statesman is, or should be, a builder-up?

Both are essential if peace and not merely the war is to be won. Both are complementary, the soldier preparing the way, and the statesman exploiting each victory, not only to ease the way, but to achieve the end—a profitable peace.

Has this been done? It has not been done.

Look at the dreadful muddle over Italy in July-August 1943. The problem which faced us then was not a judicial or a sentimental one. Instead it was a strategical one, for the whole Axis had suddenly split into two. Into that gaping crack we should, instantaneously, have driven our political wedge. We should have welcomed Italy's defection, not because we wanted to fondle the Italians, but because by treating them magnanimously we should have stimulated within the satellite countries a feeling that, were they to surrender, they would be similarly treated, and, therefore, it was a propitious time for them to ground arms.

I go so far as to suggest that this feeling would also have percolated into Germany, and have laid the foundations of an internal front—that is, an anti-war front.

Further, that had we followed this up by skilful propaganda, in July last, when the revolt against Hitler occurred, this internal front might well have tipped the scales in its favour.

Had it done so, the European War would have been over last summer. Had it not done so, we could not be worse placed than we are to-day.

Instead, for forty days and forty nights we wrangled with Badoglio over what we and he meant, didn't mean and thought we meant by Unconditional Surrender. What was the result? Though Badoglio surrendered, Italy slipped out of our grasp. We bagged an old man of seventy-three and a king dwarf; Mussolini was whisked away from under our very noses, and from that day to this we have been fighting our way up the Apennines.

Next, when on 20th July last, Beck and other German generals revolted, did we exploit their revolt, not because we liked them—instinctively we dislike traitors—but in order to fortify dissension?

Not a bit of it. All we could say was, "that the rivals of Hitler's power are no friends of the Allies". Of course not; yet they might have been turned into very useful instruments.

What bungling. What amateurish statesmanship. It is like a curate's tea-party passing sentence on Satan.

A little later on came General Patton's break-through at Avranches, and his amazing sweep to Paris which threw the whole of the German forces west of the Seine back in rout.

So overwhelming was the blow that it looked as if the end of the war were in sight. It might have been had the politicians risen to the occasion. But instead of oiling the wheels of victory, they threw a bunch of monkey wrenches into the machine—Bretton Woods, Dumbarton Oaks, partitioning of Germany, pastoralization of Germany, international control of the Ruhr, etc.

Why were these things done? They were done because those who did them had no notion how to wage political warfare. They could not see that it is as necessary for a statesman as for a general to keep a cool head. What would we think of a soldier who, annoyed by his enemy's resistance, in a fit of temper divulged to him the intentions of the operations he had in mind?

"Never do what your enemy wants you to do" is a sound maxim. Yet all these threats were precisely what the enemy wanted. His army was in rout, and little could he do to save it. Had it not been that the secret of Unconditional Surrender was now divulged, that what it really meant was the dismemberment of Germany, I much doubt whether that routed army would—

as it did—have suddenly turned about and faced its enemies with all its old vigour and stubbornness.

I hope we have now learned our lesson, which is this : The political attack is essential to the economy of the military attack. Whereas the aim of the latter is the overthrow of the enemy's armed forces, its aim is the overthrow of the enemy's will to fight.

This cannot be accomplished by threatening him with a peace which is worse than war, but only by a peace which, when he realizes that militarily he has lost the war, is more acceptable to him or to a large faction of his people than continuing the war.

The problem is one of aims, and as the war is total, aims should not refer to Germany only. In August 1941 our aims were defined in a most statesmanlike document—the Atlantic Charter. It had nothing to do with a peace of compromise or of negotiation. In it was set down a new way of life for the whole world and not only for Germany. Once it was published, all that was necessary was to elaborate it, showing, step by step, how it could be implemented.

At the time, this Charter was accepted with universal applause. In June 1943 Mr. Churchill said that so long as the United States and Great Britain marched in harmony with it "all would be well". Two months later President Roosevelt, in importance, bracketed it with the Declaration of American Independence, and on 1st December, at the Teheran Conference, he, Mr. Churchill and Marshal Stalin, in a declaration concerning Iran, once again proclaimed the Charter to be the keystone in their policy.

Then, on 23rd February, 1944, came the bomb-shell which blew the political bottom out of the war. That day, in the House of Commons, Mr Churchill said : "There will be, for instance, no question of the Atlantic Charter applying to Germany as a matter of right and barring territorial transference or adjustments in enemy countries."

This declaration was received with "Cheers".

What were their echoes? Not only the firm determination of Germany to fight the war to a finish, but also a growing sense of doubt and uncertainty throughout the world as to what the Allied Powers were fighting for, and a sense of untrustfulness in the liberated countries which in the place of the Charter watched a rapid return to pre-war power politics.

Such is the situation as it faces us to-day, and in which the military events of 1945 will be framed—a war without a political bottom.

It is an unfortunate situation because the war in Europe is only half of our problem. Japan remains to be conquered ; therefore, each day the war in the West drags on, it carries with it a whittling down of Allied endurance to wage a long struggle in the Far East.

Further, should the war in Europe end in chaos, such complications are likely to arise that vast Allied forces will have to be retained in that continent.

Further still, should the war in the Far East also end in chaos, what kind of peace do we expect world-wide chaos to hatch out?

The trouble is that the war horse has run away with the peace jockey, and not towards the winning-post—a reasonable peace—but instead towards an unfathomable bog—world revolution.

Should this be agreed to, and I fail to see how it can be disagreed to, then

the fundamental problem for 1945 is for the jockey to regain control of his horse, and with a reasonable application of reins, whip and spurs guide it towards the winning-post: not an unfathomable bog—a world in frantic revolution—but a peace in which the freedoms of the Atlantic Charter can strike root and grow.

Sunday Pictorial, 31st December, 1944.

VOLUNTARY SERVICE OR CONSCRIPTION

THOUGH it may be accepted that, morally, one volunteer is equal to three impressed men, it in no way follows that, in fire-power, one musket is equal to three. Obviously then, so long as the output of muskets does not exceed the number of men willing to shoulder them, size for size, a voluntarily enlisted army is superior to a conscript one. But, directly the number of muskets begins to exceed the number of volunteers, superiority is at once tilted in favour of conscription, and rapidly so when the musket is in question, because it is so simple a piece of mechanism that men of the meagrest intelligence can with ease be taught to handle it.

Until the advent of the Industrial Revolution, all fire-arms were expensive, and, therefore, their output was limited and in consequence armies remained small. But with the introduction of steam power all was changed. Already, as early as 1772, we find Guibert in his *Essai général de tactique* dreaming of things to come. It was that European hegemony would fall to whichever nation first created a true national army. Out of such-like dreams, for others followed, the pressure of military demand, more so than any other, hastened factory organization, with the result that by 1785, in France, muskets were being mass produced with interchangeable parts.

It is, therefore, no coincidence that, thirteen years later, General Jourdan and the Council of Five Hundred introduced conscription for all men between twenty and twenty-five years of age, and as my friend the late Colonel F. N. Maude wrote many years ago now: "No law on the statute book of any nation has exercised a more far-reaching influence on humanity." Alone it rendered Napoleon's policy of conquest possible, and his boast that "I can afford to expend 30,000 men a month", which he made to Metternich in 1805, has determined the course of history ever since.

The voluntary system was doomed, not by the will of man, nor by his innate pugnacity, but by steam power—the offspring of his intelligence, and one man at least clearly saw its consequence. It was Baron de Jomini who, looking back on the Napoleonic conflict—throughout which he had served—predicted that war would become "a bloody and most unreasonable struggle between great masses equipped with weapons of unimaginable power. We might," he commented, "see again wars of peoples like those of the fourth century; we might be forced to live again through the centuries of the Huns, the Vandals, and the Tartars."

Though, as we now know, his fears were well founded, after the fall of Napoleon, the only country which maintained conscription on a full footing

was Prussia. There it was accepted by General Karl von Clausewitz as the foundations of his theory of the nation in arms, according to which "war should be waged with the whole might of the national power". Nevertheless, like all other armies of that period, Prussia's was limited in size, not because muskets were lacking, but because, until the introduction of railways, means of transport set a limit to the numbers of men which could be supplied in the field.

With the railway war entered its saurian stage, and it is no coincidence that the nation which had given birth to Clausewitz was the first to grasp its military values. Thus it came about that the genius of George Stephenson gave life to the Clausewitzian conception of the nation in arms, which henceforth grew and grew.

From 1866 onwards, mass armies take the field. The long-service voluntarily enlisted army progressively gives way to the short-service conscript. Quality is ousted by quantity, and war becomes the affair of the "average man". Further the larger armies grow the more dependent do they become on industry to equip, arm and supply them. Thus the nation in arms demands also a nation of armourers, and war strides out towards its total goal. Women are conscripted as well as men, labour is conscripted, science is conscripted, industries are conscripted, until eventually the entire national life is marshalled in the cause of war, and not only does voluntary enlistment but all voluntary activities cease.

A hundred years after Jomini's prediction, Oswald Spengler sat down and wrote :

"For this is a century of gigantic permanent armies and universal compulsory service. . . . Ever since Napoleon, hundreds of thousands, and latterly millions of men have stood ready to march. . . . It is a war without war, a war of overbidding in equipment and preparedness, a war of figures and tempo and technics, and the diplomatic dealings have not been of court with court, but of headquarters with headquarters."

These words were written nearly thirty years ago, since when military technique and tempo have been so intensified that the armies, navies and air forces of the last war are now completely obsolete ; also is the industrial organization which maintained and supplied them.

The main changes have been in two directions : (1) towards an ever-increasing mechanization on land, at sea and in the air, and (2) towards the extension of compulsory service to all forms of war labour, as well as to the various civil defence services—A.R.P., A.F.S., Home Guards, etc. Thus has the simple nation in arms, as visualized by Clausewitz, evolved into the highly complex total war state—a one-eyed Cyclops.

As regards the first of these changes, it is now becoming apparent that fighting power is rapidly passing out of what may be called its hand tool into its machine tool stage, as manufacture has steadily been doing for over a hundred years. More and more are fighting organizations becoming factories of lethal power rather than assemblies of fighting men, which means that, as weapons become more technical, also must the men who work them become more skilled. Therefore, intelligence, far more than muscular strength, is required, and the consequence is that war as a whole is steadily becoming more and more a matter of the "special" instead of the "average" man.

Because of this tendency to seek perfection in quality more than in mere quantity or weight of weapon-power, a return—anyhow in peace-time—to the professional long-service army will in time become imperative. A medium-service army, such as our old regular army was, cannot possibly foot the bill, because it will never attract men of high intelligence; nor will a conscript army, because its two to three years' service is insufficient to produce the technical and tactical quality demanded. Voluntary enlistment is, therefore, the only possible basis upon which a professional long-service army can be recruited, and it requires that its rates of pay should, at the very least, be equivalent to the highest offered in the skilled labour market.

Does this mean that compulsory service will eventually vanish? I doubt it, because it seems to me that the main social tendencies to-day are towards compulsion and regimentation, not only for purposes of war but also for purposes of peace. In other words, towards the establishment of the socialized or slave state, as predicted by Herbert Spencer over sixty years ago. Therefore, the freer, more intelligent and more privileged the armed forces become, the more likely are they to grow into a governing aristocracy, and the more likely are all other classes of men to sink into a servile, regimented proletariat. In fact, a return will be made to the Feudal Order, of which M. Boissonnade in his *Life and Work in Medieval Europe* has said:

"In the name of the protection which they claimed to secure for the masses, the feudal classes chained men to the soil or to the workshops, claimed to regulate every sort of activity, divided the fruits of labour as they pleased, and weighed down the multitudes under the yoke of a capricious and tyrannical authority, though obliged to allow them a minimum of material advantages."

As the old feudalism was established by armoured knights, so does it seem that the new will be established by armoured machines. The sole marked difference between the two being that in the one chivalry abounded, whereas, judging from the present war, in the other it will be unadulterated devilry.

Peace News, 16th March, 1945.

PEACE, POWER AND POLICY

LAST time we won the war we lost the peace. We lost it because we refused to see that peace, as much as war, is a problem of power. Both express human activities, and life itself is power—its acquisition, its maintenance and its expenditure.

Physically, man is a one-tenth of a horse-power engine with his intelligence as its driver. And a nation is an aggregation of men, it also is an engine, and its driver is called "politics". All politics are wrapped up in power, and to attempt to divorce politics from power is as foolish as to attempt to divorce heat from friction.

Instead of emulating the astronomer in the fable, who, because of his star-gazing, fell into the ditch, had we, in 1919, living as we did in a shattered world, turned back to old Thomas Hobbes—the realist of a turbulent age—

we could not have made such fools of ourselves. What did he, in 1651, write in his *Leviathan*?

"The first and fundamentall law of nature is *to seek peace and follow it*. The second the Summe of the Rights of Nature is *By all means we can to defend ourselves*."

Though we did seek peace, we scrapped our defence. With our heads in the clouds of the League of Nations we stumbled into the disarmament ditch. We refused to see, as Hobbes had warned us, that "Covenants, without the Sword, are but Words, and of no strength to secure a man at all."

Now we do see it; hence Dumbarton Oaks and San Francisco. Yet, it may be asked: Will a new league, even if girt with a sword, preserve us?

I doubt it, because nations, like individuals, are always divided into two groups—the satisfied and the unsatisfied. Some want to maintain the *status quo*, others want to change it. Therefore, sooner or later, friction is inevitable. Thus far in history no would-be peace league has lasted a generation. Most have either been still-born or else have died in the cradle.

With vision, Hobbes wrote: "The general inclination of mankind is a perpetuall and restlesse desire of Power after power, that ceaserh only in death."

Germany is now politically dead, for all power has been taken from her. Absolute power has passed to her conquerors, and should Hobbes be right, then at no very distant date friction will once again engender heat, and heat—possibly another conflagration.

Therefore, League or no League, this time we must rely on ourselves. We must seek peace and follow it; also, by all means in our power, we must prepare to defend ourselves.

A poet once wrote, and his words should be pinned up in every house:

"My son, do not fear to be strong because men have ta'en oath to be mild,
For the arm that can fell the great bull can uphold the faint form of a child.
If they say, 'Oh, my brother, be still, lo! the world shall let blood nevermore'.
Do thou answer, 'So be it', and place fifty thousand more rifles in store!"

Last time we placed them on the scrap heap, and what was the consequence. When, in 1940, the crash came, one of the first things we did was to ask the United States for 500,000.

What should we have done in 1919? We should have closely examined the war and assessed its power. Had we done so, we should have discovered that its four great power lessons were: The increasing need for (1) political authority, (2) national discipline, (3) economic self-sufficiency, and (4) machine weapons in war.

Upon these four lessons the defeated nations, more particularly the U.S.S.R. and Germany, built their total States in order to be prepared for war, whereas we, the French and the lesser members of the League spent twenty years talking war out of commission!

What should we do to-day, now that peace, or anyhow a cessation of hostilities, is approaching? We should do what we failed to do after the last war, we should assess its power and on our valuation seek "By all means we can to defend ourselves".

As this problem is immense, for it embraces all forms of power, social, political, physical, moral, spiritual, industrial, agricultural, financial, scientific, etc., and military, here I can do no more than briefly examine the last of these power components.

In order to simplify the problem, I will divide the war into five strategical periods :

- (1) The German successes in 1939-1940.
- (2) The German failure in the Battle of Britain in 1940.
- (3) The German successes in the Balkans and Crete in 1941.
- (4) The German failure to conquer Russia in 1941-1942.
- (5) The Allied successes in 1943-1945.

First, I will examine the two periods of German success, next, the two of German failure and lastly the period of Allied victory.

Periods (1) and (3).—In August 1914 Germany's fighting man-power in the West was superior to her enemy's ; yet it did not win. In 1940 it was inferior ; yet it did win : Holland was conquered in 5 days ; Belgium in 18 and France in 35. Already Poland had been conquered in 35, and Norway to all intents and purposes in 2. Further still, during 1941, Yugoslavia was conquered in 12 ; Greece in 18 and Crete in 10. Such consistent rapidity of conquest was utterly novel. How did it happen, what was behind it ?

The answer is, machine-power and not man-power, and in spite of the fact that, when compared to what it is to-day, machine-power then was still rudimentary and experimental.

Though in Holland, Belgium and France, as in Poland, the Germans deployed a large number of infantry divisions, the decisive fighting fell almost entirely to tanks and aircraft. Though exact figures are still unobtainable, it is improbable that the personnel of these two forces exceeded 200,000 men. France, a first-class power, was in the main conquered by this minute force and at a cost to her enemy of 27,074 killed, 111,034 wounded and 18,384 missing—that is, considerably less than one-third of the casualties we suffered during the Battle of the Somme in 1916 ! In Poland it had been much the same, the German losses numbering no more than 10,572 killed, 30,332 wounded and 3,400 missing, or slightly more than two-thirds of those on the first day of the Somme.

Never had great modern campaigns been so bloodless, so rapid and so decisive.

Tactically, the conquest of Yugoslavia and Greece was even more remarkable, because both being mountainous countries are anti-tank areas. Nevertheless, when tanks and aircraft work in close combination, such regions are no more difficult to conquer than open plain lands. Mountains are no obstacle to a flying machine, and as all major operations are in the valleys, aircraft can even more easily concentrate against the enemy and his communications than in plain warfare.

Yet of all the conquests of these two periods, those of Norway and Crete were the most original, and they clearly proved that the true military use of aircraft is (1) as a covering weapon, and (2) as a flying carrier, and not merely as a long-range gun. To have attempted to bomb Norway and Crete into submission would have taken months, possibly years. But, granted surprise,

then, when occupation by ground or air-borne troops coincides with cover by bombing, conquest can be reduced to days or even hours.

Periods (2) and (4).—When we examine the second and fourth periods, in the first we find that failure was due to the application of a faulty tactical theory, and in the second to faulty strategy. The theory was that, because bombing aircraft can avoid armies and fleets and paralyse them by striking at their moral base, the civil will, with such overwhelming force that the people will overthrow their government and surrender, they can win a war on their own.

The Italian General Douhet was the high prophet of this short cut to victory theory. He went so far as to lay down that, in face of a superior bombing force, all anti-aircraft defences, including fighter aircraft, were useless. Fortunately, this part of his theory was not accepted by the R.A.F. Had it been, there would have been no Battle of Britain, instead an indiscriminate slaughter of Britons. What the Battle of Britain proved was that air defence is more vital to national preservation than air attack.

In the 1941-1942 Russian campaigns the faulty strategy was to apply the armoured tactics which had succeeded in shallow theatres of war to a deep theatre. The problem is much the same as in running. A runner who can run 100 yards in 10 seconds would not expect to run 1,000 yards in 100 seconds or a mile in 176. Only in a relay race can such speeds approximately be attained.

The crucial German error was that they had no relays. To conquer Russia rapidly demanded vast reserves of machines, meticulously organized to overcome space at top speed. They had not thought out the spacial problem, and not having the necessary machine power at hand, they fell back on man power, and not only clogged their communications, but presented the Russian armoured forces with magnificent targets.

Period (5).—Towards the end of 1942 the tide turned against Germany, and it was machine-power which turned it. In a former war we should have pumped man-power, or money wherewith to raise man-power, into Russia. This time we pumped machines—lorries, tanks, aircraft, railway locomotives, etc.

It was machine-power that wiped out the Luftwaffe, crippled German industry, and won the battles of Alamein and Stalingrad. It was machine-power that enabled us to land in Morocco and Algeria, in Sicily, in Italy and in Normandy. And it was machine-power which thence onwards carried the Allies to Warsaw, to Paris, to Brussels, to Vienna and to Berlin.

Do not imagine that I am decrying fighting man-power—I am not. It also is essential, but in this machine age less so at the beginning than at the ending of a long war.

To prepare for a long war is wise, but to plan to fight a long war instead of a short one is madness. Therefore our tactical aim in the next war should be to bring its end as close as is humanly possible to its beginning.

Directly it is declared or undeclared, we must be ready to launch into action a maximum of machine-power, and not as heretofore trust that the gods will give us time to build up fighting power at our leisure. Will they? Can they in an age of power-driven machines?

Until a few years ago the basis of tactical power was men, now it is machines.

As in industry hand tools have increasingly given way to machine tools, so in war are hand weapons increasingly giving way to machine weapons. Not merely to tanks and aircraft, to motorized and mechanized troops, but to veritable lethal factories of war.

Fighting forces and their equipment have now to be planned for operations and not merely fitted to them, e.g., the Normandy landing. The days of the general-purposes army and of the average man as soldier are in their evening, and those of specialist armies and of special men are in their dawn.

When man was the power unit in war, conscription was the logical power policy to adopt; for quantity rather than quality of power was the aim. Does conscription still hold good when quality leads and quantity follows? How can it? Because the brief training of the conscript is totally insufficient to produce the technical and tactical quality demanded in machine war.

Therefore, as heretofore, our army must be recruited voluntarily; yet in accordance with a very different voluntary system than the one which existed before the war.

Then service was of medium length, varying from three to seven years. In fact it was nothing other than a stop-gap between two periods of unemployment: the bulk of the recruits was drawn from the unemployed, and when, as trained men, their service expired, untrained in a civil profession, the majority returned to the ranks of the unemployed. If, as promised, full civil employment is to become the order of the day, it logically follows that after the war there will be no unemployed pool to recruit from. Therefore, the new voluntary system must be such that it will attract men of the fully employed category. This is essential, not only in order to fill the ranks with intelligent and educated recruits, but to gather into them men of quality and character who will make officers.

We need, therefore, a long-service army, service which offers the soldier a career for a life of thirty years—that is, a service which raises the army to the status of any other profession. The same applies to the navy and the air force; they too, must be long-service and professional organizations.

Secure as we still are from direct land attack, and limited as we shall continue to be in population, the power we want, in order to seek the peace and defend ourselves, must be of a type Continental nations cannot so easily have. Unprotected as they are by the sea, and threatened as they will continue to be by direct land invasion, they must continue to aim at quantity of land-power. Instead, we can aim at quality. Quality should, therefore, be our policy, not only because we can attain it, but also because in this machine age quality of striking power is the decisive factor.

5th May, 1945.

VICTORY 1815, 1918 AND 1945

"They say . . .
That putting all his words together,
'Tis three blue beans in one blue bladder."

PRIOR.

"OUR paper of this day will satisfy the sceptics, for such there were beginning to be, as to the capture of that bloody miscreant who has so long tortured Europe, Napoleon Bonaparte. Savages are always found to unite the greatest degree of cunning to the ferocious part of their nature. The cruelty of this person is written in characters of blood in almost every country in Europe, and in the contiguous angles of Africa and Asia which he visited ; and nothing can more strongly evince the universal conviction of his low, perfidious craft, than the opinion which was beginning to get abroad, that even after his capture had been officially announced both in France and England, he might yet have found means to escape. However, all doubts upon this point are at an end, by his arrival off the British coast, and if he be not now placed beyond the possibility of again outraging the peace of Europe, England will certainly never again deserve to have heroes such as those who have fought and bled at Waterloo, for this his present overthrow. The lives of the brave men who fell on that memorable day will have been absolutely thrown away by a thoughtless country, the grand object obtained by their valour will have been frustrated, and we shall do little less than insult over their remains, almost before they have ceased to bleed. But Fortune, seconding their undaunted efforts, has put it in our power to do far otherwise.

* * * * *

"Bonaparte's suite, as it is called, consists of upwards of 40 persons, among whom are Bertrand, Savary, Lallemand! Grogeau (*sic*), and several women. He has been allowed to take on board carriages and horses, but admission was denied to some 50 cavalry, for whom he had the impudence to require accommodation. This wretch has really lived in the commission of every crime so long that he has lost all sight and knowledge of the difference that exists between good and evil, and hardly knows when he is doing wrong, except he be taught by proper chastisement. A creature—who ought to be greeted with a gallows as 'soon as he lands—to think of an attendance of fifty horsemen!"

The Times, 25th July, 1815.

"Our enemy is laid low, and we stand, as the Prime Minister has said, higher than we have ever stood before. It behoves us to show ourselves great in the hour of triumph ; to take large views of the immense problems with

which victory confronts us and to handle them as becomes us with the calm wisdom of our fathers. When last we vindicated the liberty of the world against military despotism, there was a party in the Cabinet which desired to obtain material advantages, but the sagacity of Wellington and Castlereagh led them to fix their gaze on the future of Europe as a whole and to repudiate demands which would have tended to subvert it. It is too soon for any revulsion of feeling towards the people who have brought this awful calamity upon the whole world, and who have aggravated in a thousand ways unknown to civilized peoples the inevitable horrors of war. We drew the sword without hatred or passion because Germany compelled us to draw it; but the inexpressible brutalities which she perpetrated so long as she had the power, and which no class of her people dared to condemn, have filled us with a loathing and a righteous indignation which will not readily pass away. She has been false and cruel. She must bear the penalty of our mistrust and our abhorrence. Pleas like that which Dr. Solf has addressed to President Wilson leave us quite unmoved, and, we doubt not, will leave Americans quite unmoved. . . . Now he cries out that the 'fearful conditions' of the armistice will lead to starvation in Germany, especially as the blockade is to continue, and he appeals most 'solemnly and in all earnestness' to the President to avert the creation in Germany of 'feelings contrary to those upon which alone the reconstruction of the community of nations can rest'. This is a contemptible attempt at mischief-making. Dr. Solf has but to look at the armistice in order to see that the Allies and the United States 'contemplate the provisioning of Germany during the armistice as shall be found necessary'. That is both right and wise. It is our plain interest to do what in us lies to preserve stable government in Germany, if only in order to have some responsible authority with whom to deal.

* * * * *

"The question of European order cannot wait. Its settlement is a condition precedent not only to anything resembling a League of Nations, but to peace at all. For that reason it is the first present duty and the highest present interest of all the Allies to work for a general restoration of free and orderly government. And for that reason it should be understood in all quarters that any private squabbling between States or peoples, any attempt to snatch territorial or other advantages and to present them to the world as accomplished facts, will have for its inevitable result the creation of a general prejudice against the offender when her claims come under review. The 'Cease fire' of yesterday must be final and universal."

The Times, 12th November, 1918.

"So passes to its just doom of ignominy and ruin the most monstrous dominion that pride, cruelty, and lust of power have ever sought to impose upon the suffering millions of the nations. The pledge is fulfilled which the Prime Minister gave to the world in the day when all seemed lost for liberty: the curse of Hitler is lifted from the brow of mankind. As was the enormity of the design for the subjugation of a continent, so is the apocalyptic

completeness of the overthrow. Never in the history of war has the entire fighting strength of a great military State been more decisively ground into fragments and overwhelmed in the uttermost catastrophe of defeat. Of the host that once seemed innumerable and invincible, millions have left their bones on the lost fields from Stalingrad to Caen; millions more have been herded into captivity; and the survivors, cut off and surrounded in pockets of hopeless resistance, as helpless in their own country as in the lands they have invaded, have been saved from destruction only by surrender. In a score of the great cities of Germany scarcely a building stands intact; the Russian armies have swept like an avenging hurricane over the shattered avenues and palaces of Berlin. In the factories where, through the length and breadth of the Reich, all the resources of a rich and populous nation were harnessed, even in time of peace, to the making of engines of destruction, the wheels of industry have stopped. The fields are left untilled by the liberation of the foreign slaves upon whose labour German agriculture had come to depend. Famine and pestilence lower over Germany; only by the efforts of her conquerors can she hope to escape or moderate their ravages. More terrible in the perspective of the human story even than the material ruin is the universal execration that the years of the domination have earned for the German name. The Third Reich goes down to destruction unmourned, even by those nations which in the time of its prosperity were content to appear its friends.

"It is with the slave empires of the ancient east, and not with any polity of the European tradition, that the National-Socialist despotism must be compared; yet it was more barbarous than these because less primitive, because it was a deliberate attempt to destroy the work of centuries of advance, in which humanity had struggled towards finer forms of political and spiritual life. 'The soul of savagery is slavery.' The epigram is true, though it is but a negative expression of a truth that may be stated in positive terms: the soul of civilization is liberty. The civilization that has been reared in Europe on the double foundation of classical thought and Christian faith and thence propagated round the world is centred upon a belief in the inalienable dignity and rights of every human soul. It was these rights and this dignity that National Socialism set itself to obliterate. It was a conscious and calculated conspiracy. The thousand years of supremacy, which Hitler prophesied in all seriousness for the Third Reich, were to be secured by the use of overwhelming mechanical force, first to destroy and then to deprive of any possibility of revival, freedom of thought, freedom of expression, freedom of worship, and all the fundamental rights of man, as the inheritors of European culture have learned to treasure them. That was the dedication of German power to the service of barbarism and that was the evil against which Great Britain and France, as principal heirs and champions of the tradition of liberty in Europe, took up the challenge."

The Times, 8th May, 1945.